DEVOTED TO NAVIGATION, COMMERCE, ENGINEERING AND SCIENCE.

VOL. XI. NO. 20. CLEVELAND. O., MAY 2 1889. $2.00 PER ANNUM SINGLE COPIES 5 CENTS

Det Bel Isle & Wind Ferry Co 6

AROUND THE LAKES.

CLEVELAND, OHIO.

F. W. Wheeler, shipbuilder, West Bay City, was in Cleveland yesterday.

Mr. John F. Pankhurst, general manager of the Globe iron works company, is on a visit to New York City.

E. M. Peck, vessel owner, Detroit, arrived in the city Wednesday, presumably on business connected with his vessel property.

Three sets of the Brown patent hoists are being erected on the Pittsburgh dock to facilitate the discharging of iron ore vessels.

The steam barge Margaret Olwill was libeled Wednesday for the sum of $1,500, as a result of a collision with the schooner Kate Winslow some time ago.

Mr. George Elsey, manager of Captain Steve B. Grummond's line of steamers arrived here Wednesday on a business visit. Mr. Elsey will probably remain till the end of the week.

The new tow barge built for B. L. Pennington of this city, and others, will be launched from the Linn shipbuilding yard Gibraltar, to-day. She is to be named the B. L. Pennington.

Retiring harbormaster Peter Lynch has been succeeded by John Schieley. Lynch was offered by the Smith Bros. the position of captain on the vessel Henry P. Baldwin, plying between Marquette and Cleveland. The offer was accepted.

Captain N. Bartlett, "the good man at the wheel," from Ashtabula, opens up a milk supply depot May 1, aboard his little vessel Uncle Sam at the head of the old river bed. The captain is an old sailor man and may be considered a genius if he is eccentric.

The Globe iron works company are as busy as they can possibly be at the shipyard, and more skilled mechanics are required at their engine and boiler works. We learn that the several vessels now under construction will be finished punctually on contract time.

The committee of the Vessel owners' association chosen as representatives to meet the United States engineers at Detroit on the bridge question, left this port last night, most of them on the Detroit boat. Quite a number of vessel owners joined the committee, so that this port will be well represented at Detroit to-day.

Captain Charles Benner, owner of the tug Hattie L., was bound over to the police court Wednesday. His arrest and hearing before a justice of the peice grew out of his having had Captain Joseph Todd arrested and then settling the case out of court. Captain Bennet's arrest was, therefore, on the charge of compounding felony.

The Chase fog whistle machine company have opened an engineer's supply store, and hold a fine stock of goods. Engineers would do well to patronise this energetic firm. We feel sure that they would always meet with courtesy and prompt attention.

G. C. Barnes, agent for the Ætna grate, is fitting up a number of new vessels, among which we may mention the Lehigh Valley Co's new propeller Cayuga, the Cleveland iron mining company's propeller Frontenac, the new Bradley & Grover steamer Pasadena, the Neshoto, and the new boat building for Captain James Corrigan, and Huntington, at Marine City.

A telegram from Mr. James Corrigan at Bayfield Wednesday morning says that the propeller Australasia has been pumped out and released from the rocky shore of Michigan island, one of the Apostle group, where she stranded with her consort, the schooner George, a week ago. The dispatch makes no mention of the George, but it is probable that she has not been released as yet.

The east side patrol wagon was called to the Union depot Saturday evening to transfer James Sprague, a sailor nineteen years of age, to Lakeside hospital. His injury consisted of a broken leg. While at work on the Corsica at Ashtabula Friday night Sprague fell from the rigging to the rail, and thence into the water. He came to Cleveland Saturday evening, and until his arrival at the hospital he had received no medical attention.

Charles Champness is building a fourteen feet keel boat for Captain Humphrey, to be used as a ship dinghey; also building a sixteen feet flat bottomed skiff for Captain Stone for a similar purpose. Will build to the order of Dr. Esch, a thirty feet steam yacht, and a yawl boat for the Cleveland shipbuilding company. Two for Captain Thomas Wilson's new steamer, and one metallic life boat: also five row boats for hire on Chippewa lake.

L. P. and J. A. Smith opened the new vesselowners' drydock Wednesday by docking their propeller Joseph P. Farnan, which is to receive a new wheel. The dock is now ready for general work and the next boats to go in are the barges Empire and Wesley. They can be docked together, as there is 325 feet of space on the keel blocks, with ample width to take care of the largest carriers on the lakes. The dock will be run under the direction of William Radcliffe & Son in connection with their shipyard.

Mr. F. Coles who has been in Buffalo during the past week covering the boilers o the Wm. B. Morley, has returned to the city well pleased with his work. Not only has Mr. Coles superintended putting over the boilers necessary covering but he has placed on the M. B Morley the fog whistle manufactured by the firm for which he is doing work. The Ætna grate in this regard comes in for its dues, we must say from what we have learned from those who have used the article that it is the best shaking grate that has ever been manufactured.

Mr. F. Coles, who has been in Buffalo for some days placing appliances aboard steamboats at that port says that all the shops having marine work to do, are obliged to turn away work and that all interested concede that a busy and prosperous season is about to follow the moderate winter we have had. We may say that Messrs. McCutcheon, who has a corner on vessels supplies and steam fitting at this port, have more work than they can do. It has been our pleasure to note the cause of his, that when this firm say they will do a job they do it and charges are as equitable as they can be made.

The propeller Progress is now in the Cleveland dry dock, and will ship a new sectional wheel manufactured by the Globe Iron works company, and a new rudder. She has had part new stern post, new piece of keel 40 feet in length, two pieces of garboard strake about thirty feet each side from the stern post, but s calked, searched up and new iron shoe piece aft. The tug Red Cloud has been calked, shoe straightened, re-ironed and minor repairs, schooner H. D. Root, butts calked and searched up.

The Chase fog whistle machine company are as busy as they can possibly be fitting their whistles on the new tonnage launched from the various shipyards. A skilled employee left here last night for Bay City to place machines; also, to Marine City. A machine will also be placed on the Manchester at Detroit, and several other boats now in course of construction. The fog whistle machine is evidently growing in favor, and it seems only a question of time until the majority of vessels will be fitted with them.

Many of our readers will be sorry to learn that Captain James Scott, of Oswego, will be a considerable loser by his schooner, the George, going ashore on Michigan island, Lake Superior. Previous to starting on the voyage, Captain Scott took out an insurance policy, but the risk did not begin until 24 hours after the vessel had got ashore, and according to this, the veteran mariner will probably have to labor all through the season to pay for his accident. The schooner George was built in 1878 by Rand & Burger at Manitowoc, measures 751 tons, had an A2 rating, and a valuation of $29,000.

A system was recently discovered by a Cleveland inventor, Mr. Robert W. Thompson, to take phosphorous, sulphurs and other poisonous gases out of iron ore while under the smelting process. This system has not only been patented but has received the commendation of several managers of iron ore works and it will positively prove a patent that will be of much benefit to our iron ore men. A test of this system will be made at Pittsburg, Pa., and the result of the experiments given to the manufacturing world through the medium of the class papers relative to these matters.

The new steamer Frontenac, built by the Cleveland ship building company, underwent her final survey yesterday. The local inspectors, Messrs. McGrath and DeWolf, critically examined every department, and were thoroughly satisfied with the entire vessel and outfit. We note that the Frontenac hails from Ishpeming. The second boat in course of construction for the same owners is getting well along, being all in frame, and considerable outside plating on. A large force of men is kept steadily at work on her.

It has been said in times past that the dummy light Point au Pelee, which is the most important light on Lake Erie does not answer the purpose for which it is intended. Where pilots expect to find a good light they find one that will not answer their expectations. The Dummy light from lack of attention, oil or burners does not give the testimony regarding location that our pilots have been led to expect and we therefore say to the lighthouse board, investigate this light and if you find our assertions true you can do no better than to take immediate action to remedy the evil.

DETROIT, MICH.

Special to the Marine Record.

Detroit is to have an electric boat in a very short time. Fred Ballin, manager of the Detroit boat works, has been busy getting ready for the experiment, and will have a test in a few days. The boat will be a small one, and will be worked by storage electricity. Her speed is expected to be about eight miles per hour her electric bunkers will contain fuel for five hours' trip. If she is a success more and larger boats will be built

Mr. E. M. Peck, vessel owner, left here for Cleveland Tuesday night.

The new boat under construction at Gibraltar, Mich., for Mr. B. L. Pennington and others, of Cleveland, is now almost complete, and she will be launched today. She has been named the B. L. Pennington, and will tow as consort to the propeller George Spencer.

Captain Elsey, a veteran lake mariner, was in the city last week on a visit to his son George and family. Many of the captain's old shipmates and friends will be pleased to hear that he is still hale and hearty, and likely to keep on the high side of the weather for many a day. Captain Elsey now resides at New Baltimore, Mich.

We are pleased to learn that Captain Charles Gale, Sombra, Ontario, is again convalescent, and ready to stand watch and guard over his crew of quadrupeds and winged animals.

The Detroit drydock boiler works have just completed two boilers; dimensions 12 feet 6 inches by 11 feet. They will be shipped to Wyandotte.

The Detroit drydock company brought suit in the United States circuit court some time ago against F. W. Wheeler, the shipbuilder of West Bay City, Mich., for an infringement on a patent iron or steel deck stringer and sheer strake, the invention of Frank E. Kirby, consulting engineer of the company. Mr. Wheeler was in the city Tuesday and made arrangements whereby the suit pending will be withdrawn, and discontinued. We understand that F. W. Wheeler agreed to pay a satisfactory royalty to the company, and on these terms he will continue the use of the patent, paying royalty for its use on all the vessels he builds.

The new steamer Thomas W. Palmer, built at Wyandotte for the Percheron steam navigation company, is fitted out and left here on her trial trip Wednesday. Mr. Thomas W. Palmer, the president of the company whom the vessel is named after, and a select number of gentlemen will accompany her.

The Detroit river tug lines are now running wild, and prices have been cut considerable, half rates being paid in some instances. Tug owners are getting sore over this state of affairs, and there is some talk again of an association being formed, though on somewhat different lines to the proposed spring combination, which insisted that boats should be repaired, etc., after the season's work at the expense of the pool; the better class of boats, which would probably need no outlay in the fall, did not feel like working to repair others, and the arrangement fell through.

The schooner Ganges was released Monday by the steamer Maud, from Carlton Island, Lake Ontario, uninjured, and proceeded to Ogdensburg.

The sale of Captain C. H. Lane's fleet, reported here on good authority last week, is erroneous, and Toledo people are still left to figure on the C. B. Jones.

The new steamer John Mitchell arrived here on her maiden trip Monday night. She had 1,970 tons of ore, with 125 pounds of steam. She makes thirteen miles an hour.

Ferry boats assisted the Republic and Magnetic, aground below the St. Clair canal, Monday night.

The passenger steamer Pearl is laying tied up to her dock at Springwells, and has not yet made any move toward fitting out, though it is reported that she will resume her old route between Cleveland and the Islands on the 1st of June. We are informed that Captain Steve B. Grummond has been figuring on purchasing her, the sale however hanging fire at a difference of $5,000. It is safe to say she will be kept in the rivers if Captain Grummond becomes the owner.

Captain Alex. Ruelle's tug J. L. Miner is chartered by Charles Dunbar to assist in the dredging operations, etc., at the Limekiln crossing. The M. D. Carrington is busy at vessel and raft towing, and the chartered Saginaw tug, C. C. McDonald, is kept moving. If business should improve Captain Ruelle will accept charter of another tug now offered to him at a reasonable figure.

Captain Steve B. Grummond is still rusticating at Mt. Clemens though his health is steadily improving. Rheumatism, we understand, is the enemy.

J. C. Goss, sailmaker and rigger, has taken a contract to fit out the new steamer Wilhelm, building at West Bay City, by Captain James Davidson, bunting, flags, etc., included. Mr. Goss has a gang of men at work on the tug Ralph at Marine City; also on the new boat building at Simon Langell's yard, St. Clair.

The fourth attempt to sell the Morley fleet, consisting of the steambarge R. C. Brittain, and barges Reindeer and Colorado, was successful, and after a vast amount of wriggling they were finally knocked down to Mr. Peters, Toledo, Ohio, for $8,610. Mr. Lindsay, the official assignee, tried every means in his power to make an advantageous sale, and the vessels were put up separately several times and as often grouped; $5,500 was offered by Mr. Hurley for the steambarge; Mr. O. Toole, late owner of the barge Oconitis, offered $400 for the Colorado, and J. W. Westcott made an offer of $500 for the Reindeer. These figures were about duplicated last week, and it was concluded that $8,610 was rather better for the estate than $6,400. The bidders of last week were conspicuous by their absence.

Work at the Detroit drydock company's yards was kept a humming, centennial celebration notwithstanding. The propeller George Spencer was docked early in the afternoon for calking, overhauling, wheel, bearings, etc., steam yacht Pastime has been calked, painted, and wheel fixed, tug Gordon Gauthier new shoe and searched up, schooner Groton has received a new fore lower mast, bowsprit, rudder post and new after pieces on rudder, calked, and new work and repairs on deck; she is now being painted and will be in first class shape when completed. The yacht Roberta, Mt. Clemens, is in for a new wheel manufactured by Samuel F. Hodge & Co. The new boat numbered 94 is receiving a priming coat of paint outside, boat building for Captain Humphrey and others, has her bottom planked, bored for stern pipe, and will ship one of the drydock engine works propeller wheels. The new boat for the Central Vermont line is getting well along, already about fifty frames are up, and a large gang of carpenters are kept steady at work.

The new City of Detroit was crowded with visitors last Saturday night, viewing the effect of the Brush electric light system. All lights were turned on, and the saloon presented an appearance equal in brilliancy to an operatic stage, the entire system working in perfect order. The Brush electric light company is represented by Mr. A. Green, who, with a few skilled workmen will remain on board until the steamer reaches Cleveland, which will probably be in a few days. Previous to leaving Detroit however she will take the municipal officials and invited guests for a whirl on the river. Her furniture, carpets, upholstery, etc., are now nearly complete, and the commodious bridal apartments are simply elegant in their appointments, and as we have said before she is without a peer on the chain of lakes.

Two more large propellers will shortly be immersed at Wyandotte; one has her topmasts fitted and stayed, the other has the three lower masts stepped.

Mr. Bloom, sailmaker, has received an order for fifty tents to accommodate Dr. Campbell's indian encampment. Several of the tents are set up in the sail loft, and as quick as they are made an Indian artist belonging to the encampment gets to work with brushes and colors and variegates the outside with pictures of Indian braves in their war paint, male lions, fishes, tomahawks, and every conceivable implement used by the various tribes, each tent having different figures. Mr. Bloom must surely feel highly honored at the distinction conferred upon him, as he is made to represent in a measure an advance agent, the mail for the encampment and other matters being referred to his keeping. A very large tent, 80 feet by 160 feet will shortly be made for the same purpose.

In conversation with a prominent official of the Michigan Central railroad, we learn that the ferry boat, built by the Cleveland ship building company and put into service last winter, is a perfect success. All the officials are thoroughly satisfied with the performance of the ice crusher, and are contented to know that she will cleave the way through any amount of ice the river can hold.

J. B. Wilson & Co., foundry and mechanical engineering works, are finishing a fore and aft compound engine to the order of Henry Houghton, Detroit; dimensions 15 and 27 by 22, it will be shipped to a new boat building at Bay City. They have also recently shipped to Cleveland a Cram's steel pile driving hammer. They are the sole manufacturers for this excellent appliance.

Thomas Love, West Detroit boiler works, is making an upright boiler for White & Smith; dimensions 4 feet by 5 feet 6 inches. Mr. Love is also busy on stationary work.

Mayor Gardner and a number of gentlemen from Cleveland will come on to Detroit and take the first trip down in the new City of Detroit in a few d

Clark's drydock, Springwells, has been kept busy since the launch of the Philip D. Armour, who, by the way is doing very promising work on her maiden cruise, on a draft of 14 feet 9½ inches. She carried 1,936 gross tons of ore at 11 miles an hour which speaks in great praise of the new machinery. The recent excellent work done on the propeller B. W. Blanchard, when her overhead arches were taken out and steel arches substituted, both strengthens the vessel, improves her appearance, and facilitates the handling of cargo. The schooner Iron State also received a thorough rebuild and raised to a double decker. The Mystic Star, Hurley Bros. owners, is receiving a thorough repair; also the schooner Lathrop. Dredge and dump scows, owned in Buffalo are having repairs done, and tug and dredges employed by the Canadian government are having repairs made. Fifty frames of the new Central Vermont line boat are in place, and extra work is piling in regularly.

SWAIN.

The plant for building iron vessels at Congressman-elect Wheeler's shipyard in Bay City will be ready for operation August 1.

SIGNAL LAMPS

For Steamers and Sailing Vesse

PATENT FLUTED LENS & PERFECT COLORS.

GET THE BEST AND AVOID COLLISIONS

These Lamps give a more brilliant light than any Signal Lamp now in use.

They have been adopted by the principal Ocean and Lake Steamers.

Over Twelve thousand now in use.

WE ALSO MANUFACTURE THE CELEBRALED

French wrought iron ranges and broilers of all sizes for steamers and hotels.

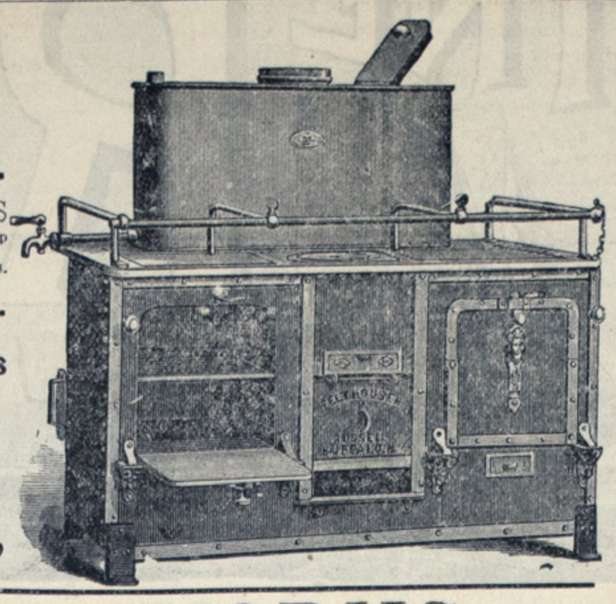
Steamboat Copper. Tin. and Sheet Iron Workers

Russell & Watson,

SUCCESSOR TO

FELTHOUSEN & RUSSELL,

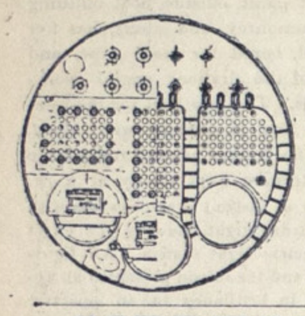
139 & 141 MAIN ST., BUFFALO, N. Y.

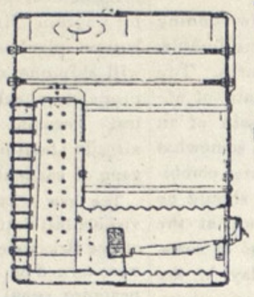


EAGLE BOILER WORKS.

M. RITER, PROPRIETOR,

Cor. Indiana and Mary St., Buffalo, N. Y.



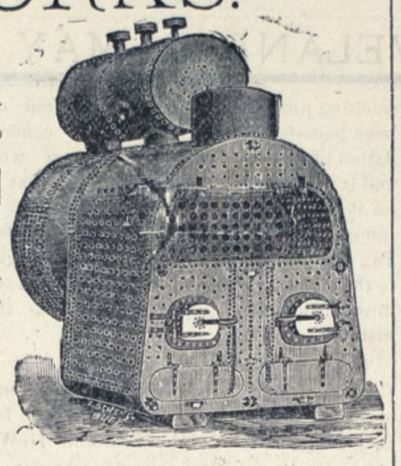


The Latest Improved Hydraulic Machinery

USED IN ALL CLASSES OF WORK

Marine, Stationary, Portable, Locomotive and Upright Boilers; also, Salt Pans, Smoke Pipes and Heavy and Light Plate Iron Work of all Descriptions.

REPAIRS PROMPTLY ATTENDED TO.



CORRUGATED FLUES FOR STEAM BOILERS.

Made in Sizes from 28 to 60 inch. in diam

WITH

FLANGED

OR

PLAIN ENDS.

Manufactured SOLELY IN THE UNITED STATES UNDER OUR OWN PATENTS AND THOSE OF

Samson Fox,

OF

Leeds, England.

Take 10th or 23d Street Ferries from NEW YORK to GREENPOINT

THE CONTINENTAL IRON WORKS

THOS. F. ROWLAND, President.
WARREN E. HILL, } Vice Presidents.
CHAS. H. CORBETT, }
THOS. F. ROWLAND, JR., Treasurer.

BROOKLYN, NEW YORK.

NEW YORK BELTING AND PACKING CO.

PERFORATED MAT.

Vulcanized Rubber Packing of Every Description.

RUBBER MATS AND STAIR-TREADS

For Halls, Floors, Decks and Companionways

Rubber Belting, Packing and Hose.

FIRE TEST HOSE FOR STEAMBOATS & TUGS.

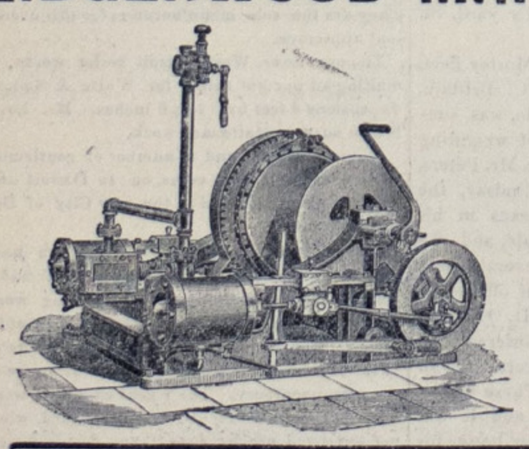
STEAM HOSE.

JOHN H. CHEEVER, Treas., }
J. D. CHEEVER, Dept. Treas. }

WAREHOUSE: 15 PARK ROW, NEW YORK.

Branches:—W. H. H. Peck & Co., Cleveland, Ohio. W. D. Allen & Co., Chicago, Ill. Post & Co., Cicinnati, Ohio.
W. S. Nott Co., Minneapolis, Minn. H. D. Edwards & Co, Detroit, Mich. Hendrie & Bolthoff, Denver, Col.
Ripley & Bronson, St. Louis, Mo. Hall Rubber Co., Boston, Mass. D. P. Dieterich, Philadelphia, Pa. Atlanta Rubber Co., Atlanta Ga.
☞ European Branch: Pickhuben 5. Hamburg (Freihafengebist), Germany. Arnett & Rivers, San Francisco, Cal.

LIDGERWOOD MANUF'G COMPANY, 96 Liberty-st. New York.



MAKERS OF

HOISTING ENGINES.

FOR VESSELS AND DOCKS.

DECK HOISTS A SPECIALTY.

Engines & Boilers Combined FOR DOCK HOISTERS

Superior Marine boilers

WHARF AND WORKS SOUTH BROOKLYN, N.Y.

WARD AND JACKSON,

Shipsmith.

All Kind of Forgings, Bolts and Truss Rods for Building.

49 Main-st Cleveland

BOSTON & LOCKPORT BLOCK CO.,

[Successors to BAGNAL & LOUD and PENFIELD BLOCK CO'S.] **BOSTON, MASS.**

MANUFACTURERS OF THE CELEBRATED

Self-Adjustable Five Roll Roller Bushed BLOCKS.

which for DURABILITY and STRENGTH, are far ahead of any other make. One trial will convince any one of their GREATER PURCHASE.

Be sure and call for the **STAR BRAND** in ordering your Blocks.

We call attention to our DIAPHRAGM PUMP, which will pump more water at a stroke and work easier than any other make in the market. Give us a trial.

NEW YORK STORE, 33 South Street,
F. BALDWIN, Manager.

We also make a specialty of furnishing the handsomest style of blocks in the market for Yachts, with special designs to suit the place.

SAMUEL F. HODGE & CO.,

MANUFACTURERS OF

MARINE,

Stationary & Portable Engines,

MINING MACHINERY AND

PROPELLER WHEELS,

Riverside Iron Works, 314 to 326 Atwater Street

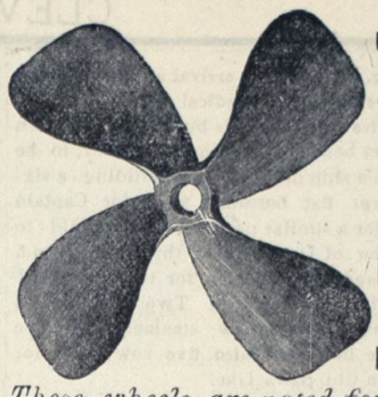
DETROIT, MICH.

H. G. TROUT,

KING IRON WORKS,

BUFFALO, N. Y.,

MANUFACTURER OF



Triple Expansion Marine Engines, Three Cylinder and Fore and Aft and Steeple Compound Marine Engines,

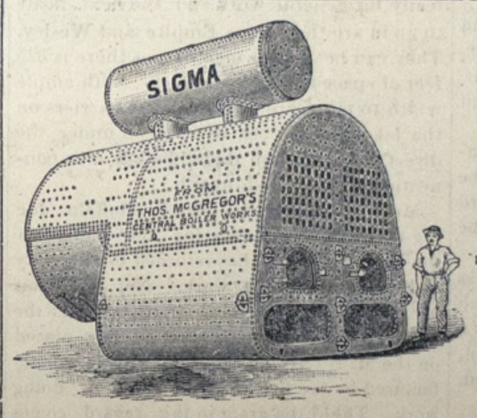
High and Low Pressure Engines

SECTIONAL PROPELLER WHEELS,

PROPELLER, TUG & YACHT WHEELS

These wheels are noted for their extra speed and towing power or a proportionate saving of coal.

PRICES QUOTED ON APPLICATION.



DETROIT, MICH.

Thomas McGregor,

CENTRAL BOILER WORKS

MANUFACTURER OF

Marine and Stationary

BOILERS,

—ALL KINDS OF—

Rendering Kettles, Tanks,

—AND—

SHEET IRON WORK

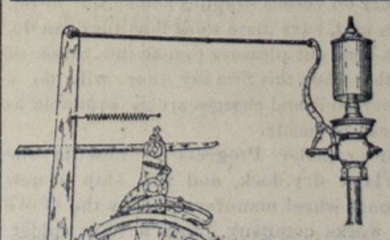
ARTHUR & BOYLAN,

Steamboats, Tugs, etc, Coaled Day and Night.

DEALERS IN LACKAWANNA ANTHRACITE COAL.

Woks: Ft. West River St., Whisky Island, C. P. R'y. Slip, Government Pier

OFFICE 130 RIVER-ST., CLEVELAND, OHIO.



Chase Fog Whistle Machine

This machine has been placed on the following steamboats during the past year: SPOKANE, WALLULA, KASOTA, CHARLEMAGNE TOWER, JR, YAKIMA, MISSOULA, SITKA, FAYETTE BROWN, R. J. HACKETT, FOREST CITY, SPARTA, HAVANA, VIENNA, OSCAR TOWNSEND, CITY OF CLEVELAND, HENRY CHISHOLM, SUPERIOR, E. B. HALE, M. B. GROVER, J. S. FAY, R. P. RANNEY, SMITH MOORE, CHARLES J. SHEFFIELD, IRA H. OWEN, CAMBRIA, CORSICA, J. H. OUTHWAITE, SAMUEL MATHER, R. R. RHODES, COLUMBIA, AURORA, OHIO, WM. EDWARDS, S. E. SHELDON, AUSTRALASIA, RALEIGH, BULGARIA, ROUMANIA, J. F. EDDY, HIAWATHA, THOS. ADAMS, A. P. WRIGHT, GLADSTONE, E. P. WILBUR, SOO CITY, E. M. PECK, ROBERT L. FREYER AND NORTHERN LIGHT,

To the President and Board of Supervising Inspectors of Steam Vessels:

Your committee to which was referred the "Chase Fog Whistle Machine" beg leave to report: "That we have carefully examined the same and find that it blows at regular intervals, being worked by the engine, thereby insuring regular and continuous blasts for any length of time that may be required and we recommend it or similar device to owners of steam as an additional safeguard to navigation.

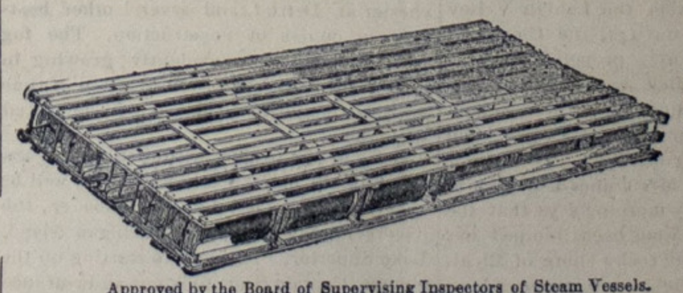
H. S. LUBBOCK,
GEO. H. STARBUCK, } Committee.
W. D. ROBINSON,

The manufacturers are the Chase Fog Whistle Machine Co.

DETROIT BOAT WORKS

—SOLE MANUFACTURERS OF—

Clark's Patent Metallic Life Raft.



SIZES AND PRICES.

Capacity. Persons.	Size.	Each.
4	3' 2" x 5' 10"	$30
5	3 5 x 6	35
6	4 x 6	40
8	4 x 8	50
10	5 x 8	60
15	6 x 16	75
20	6 3 x 13 2	90
30	7 x 15	125
40	8 x 20	160

Approved by the Board of Supervising Inspectors of Steam Vessels.

☞ Other Sizes and Proportions Made to Order.

Shops, foot Dequindre st. DETROIT, MICH.

A. S. DeVries,

SHIP AND ORNAMENTAL PAINTER,

22 South Water street, Cleveland, O.

Established in 1871. Telephone 210.

Signs. Steering Balls, Liberty Caps, Ornamental Work a specialty in Cabins.

HENRY ESCH,

Groceries and Provisions,

Fresh and Salt Meats,

DRY GOODS AND CLOTHING

Special attention given to vessel supplies.

Corner of Jay and 9th st. Manitowoc Wis.

THE ONLY SHIRT FACTORY IN-CLEVELAND, OHIO,

which sells direct to the consumers at manufacturer's prices, thereby saving two profits, with which they are taxed in any other retail store.

☞ *Genuine Home made Shirts,* ☜ all 54 inches wide, 40 inches long, full sleeves, extra well sewed, from the cheapest 50 cent cotton shirt to all kinds of *Flannel Waterproof Cassimere* SHIRTS, is conducted by the well known Boston Dry Goods Store, of Kohn & Co., 213 Detroit street, 2d door from corner Pearl street.

Through a Government order, supplying Life Saving Stations with genuine Regulation SAILOR SHIRTS, we are the only Shirt factory in Cleveland who procure the ☞ real U. S. ☜ Navy Flannel guaranteed never to shrink nor to fade and have them constantly on hand *ready made* or made to the customers order without any extra charges.

All our ☞ *own Home made Shirts* ☜ if not suited after purchased, can be returned and we make others *to order* instead. The same rule applies to all ☞ our own Home made ☜ Overalls, Jumpers and Kentucky Pants.

Kohn & Co.'s Shirt factory, 213 Detroit street, 2d door from corner Pearl, Cleveland, O

LIGHTHOUSE KEEPERS' SALARIES.

The lighthouse board has issued a circular reducing the salaries of lighthouse keepers, which says: "The board regrets to state that the appropriation for salaries of keepers of lighthouses is insufficient to pay salaries for the entire year upon the basis now allowed. This deficiency was anticipated and reported to Congress, but no money was approprited to meet it. It is absolutely forbidden by law to exceed the amount appropriated during any year. It is found that the deduction must be about 4 per cent of the annual salary of each keeper. A careful account will be kept of each deduction, and every effort will be made to have an appropriation made.

THE Senate has rejected the bill providing as far as Canada is concerned, for reciprocity in wrecking. This is most unfortunate. The act could not have been effective until the United States had taken a similar course and then the advantage would all have been to the distressed vessels on our coasts. This is a great deal worse than the conduct of the Pharisee in passing on the other side of the way to that on which the wounded man was lying; the Senate has virtually enjoined all United States Samaritans from assisting Canadian or other vessels in distress. Shame on you Senate.—*Duluth Herald.*

STEEL BARGE "103".

The News was strolling around in the neighborhood of Captain McDougall's ship yard yesterday where it beheld the captain and F. B. Dougherty, of Williams, Upham & Co., making measurements on the ground. Inquiry elicited the information that early this week Williams, Upham & Co . will begin dredging a slip at right angles to the main slip, along the captain's property plumb up to Railroad street, a distance altogether of about 300 feet. This is done in order to make room for the launching of the third steel vessel, to be known as the "103." She will be built parallel with the "102," and will extend from the latter boat to Railroad street. The work of the new boat will be an exact duplicate of the "102" now building, and will be of 3,000 tons capacity. To build two boats at the same time it has been found necessary to order more machinery, which is on the way here now. There were 103 men working at the shipyard yesterday, and the building of the other boat will cause the doubling of that number.

THE expenditure for harbor improvements on Lake Superior this year will amount to about $225,000. The dredging in Duluth harbor will require an outlay of $80,000. A deep channel will be opened parallel with Rice's Point, between the harbor and Connor's Point, and parallel with the new dock line. The channel will be deepened north of Rice's Point between Rice's Point and Grassy Point, parallel with the dock line of St. Louis bay. On the West Superior side of the harbor $60,000 will be expended for dredging. About $15,000 will be expended in dredging out an anchorage basin at Marais, Minn., and $30,000 additional for adding to the length of the harbor of refuge breakwater. Additional breakwater work at Marquette, Mich., will absorb the sum of $25,000. At Ashland, Wis., $80,000 will be expended upon pier work, of which 1,600 feet are under contract. Breakwater work at Agate Bay, Minn,, will cost $15,000.

THE GREATEST NAVY.

The Parliament and the people of Great Britain having shown themselves to be in entire sympathy with the proposal to increase the number and efficiency of Britain's war-vessels, the dockyards of the nation and the shipyards of private shipbuilders will soon resound with redoubled activity. As stated by the First Lord of the Admiralty, it is intended to construct and equip 70 new vessels, at a cost of $107,500,000, of which $50,000,000 will be provided from a special fund to be explained by the chancellor of the exchequer, and the remainder would be an addition to the navy estimates for four years. The additions to the navy would comprise 8 first-class battle-ships, each with a displacement of 14,000 tons; 2 second-class battle-ships of 9,000 tons each; 9 first-class cruisers of 7,300 tons; 29 smaller cruisers of 3,400 tons; 4 smaller cruisers of the Pandora class (2,600 tons each), and 18 torpedo gunboats of 735 tons, making a gross tonnage of 318,000 tons. Of the total sum to be expended, $57,500,000 would be assigned to the dockyards, and work to the amount of $50,000,000 would be put out to contract. The latter sum would enable 32 vessels to be built armed and equipped—namely, 1 large battleship, 5 first-class cruisers, 17 second-class cruisers and 6 torpedo gunboats—all of which would be put out to contract during the present year, provided there was no combination among contractors to run up prices. The $57,500,000 which was to be expended on the remaining 38 vessels and their armaments in the government dockyards would be allocated: $42,500,000 to engines and hulls and $15,000,000 to armaments. During the present year 20 vessels would be commenced, namely, 4 first-class battle-ships, 1 second-class battleship, 3 first-class cruisers, 6 second-class cruisers and 6 torpedo gunboats, and the whole programme would be completed within four and a half years from the commencement of the first vessel. The behavior of the Calliope in the recent gale at Samoa is but an illustration of the staunchness of British ships and the skillfulness of British seamen. Similar instances are as numerous in the annals of the British navy as strawberries in midsummer. When, therefore, the contemplated additions are made to the navy rmannewith capable men and efficient officers, the new British navy will be simply incomparable. The old land will be safe from foreign intrigue for ayears to co —*Kingston News.*

INSTRUCTIONS to mariners in case of shipwreck, with information concerning the life saving stations upon the coasts of the United States, prepared by Lieutenant C. H. McLellen, U. S. R. M., is issued to all custom houses, and vessel men may receive copies on application. The work is a most useful onee and every line should be memorized by those whose business is on the waters. The directions for restoring the apparently drowned are the most concise and explanatory that we ave ever seen.

Inspector Meneilly paid an official vis tto all the craft in this harbor last week. Everything passed inspection, and Mr. Meneilly paid a high compliment to the class of tugs built here.

SKETCH OF ADMIRAL HORATIO NELSON.

[From Chambers' Encyclopedia.]

Horatio Nelson, the greatest of Britain's admirals, was born on the 29th of September, 1758, at Burnham Thorpe, Norfolk, of which place his father, Edmund Nelson, was rector. His mother's maiden name was Suckling, and through her he could claim a collateral kinship with the celebrated Sir Robert Walpole. As a child he was feeble and sickly, and throughout life his small, frail, and attenuated frame seemed to consor but poorly with the daring and impetuous spirit which stirred and lifted him to high attempts. At the age of 13 he entered the royal navy, commencing his career in the Raisonnable; 64 guns, commanded by his uncle, Captain Suckling. Then, even more than now, promotion in the first stages of the profession, was determined by admiralty interest, and fortunately for him and for England, his uncle, shortly afterward becoming comptroller of the navy, was able to facilitate his rise. His promotion was nearly as rapid as it could be, and before he was quite 21, he had attained the rank of post captain, which fairly opened the way for him to the higher honors of the service. Up to this time, no opportunity had been afforded him of achieving any marked distinction, but to all who were brought into contact with him, he had already approved himself a bold and capable officer. Henceforward, for some years, he was nearly constantly employed in a variety of harassing services, and in all his conduct was such, that in no long time he had made himself a brilliant reputation. His growing fame was as yet, however, chiefly confined to professional circles, no very signal exploit having brought his name prominently before the public. But with the advent of the war with revolutionary France, the time had come when he was to flume amazement on the world by a series of noble deeds, in the luster of which all other naval glories look pale. In his obscure years, he seems to have been cheered under what pained him as unmerited neglect by that prescience of a grand destiny, which has so often preluded to a career of exceptional splendors. Thus, on one occasion, he writes, "They have not done me justice. But never mind. One day I will have a gazette of my own." And subsequently the same confidence is expressed with something like the depth of a religious conviction. "One day or other I will have a long gazette to myself, I feel that such an opportunity will be given me. I cannot, if I am in the field of glory, be kept out of sight, wherever there is anything to be done, there Providence is sure to direct my steps." In 1793, appointed to the Agamemnon, 64 guns, he took a distinguished part, among other services, in the sieges of Bastia and Calvi, in Corsica, losing an eye at the last of these, and in the celebrated action of Sir John Jevis off Cape St. Vincent with the Spanish fleet, to a manœvre of extreme and masterly daring, executed by Nelson in defiance of orders, that officer was mainly indebted for the splendid success obtained, and the peerage with which it was awarded. Though in the interval an expedition which he commanded against the Teneriffe had failed disastrously, with loss to him of his right arm in the assault, it was on all hands admitted that everything was done on the occasion which skill and valor in their highest combination could effect, and Nelson, on his return to England, in 1797, was received with general acclamation. He was invested with the order of the Bath, and a pension of £1,000 a year was voted to him. Being next year intrusted with a fleet, he signalized this, his first independent command of any magnitude, by the stupendous victory of the Nile, memorable in naval annals as the completest annihilation of an enemy on record. Finding the French fleet so skilfully moored, as to defy ordinary attack, he adopted the expedient of doubling on the enemy's ships, and was rewarded with success the most consummate. Of the French line of battle, two ships only escaped, to be captured afterwards, and it was considered, that solely to a wound in the head, which in the heat of the action prostrated Nelson, did even these owe their temporary safety. Honors were now from all quarters showered upon him, and in particular the gratitude and enthusiasm of his countrymen were signified by the title bestowed on him of Baron Nelson of the Nile, and a grant of £2,000 a year for his own life, and the lives of his two immediate successors. For his services immediatly subsequent, in effecting the expulsion of the French from Naples, the Neapolitan king rewarded him with the dukedom of Bronte, and a domain of £3,000 a year. These last honors, however, were in one sense dearly purchased. The single suspicion of a blot on his public fame is in regard of his relations with the corrupt court of Naples, and of certain questionable acts into which by these he was led. The only flaw in his private character was his infatuated attachment to Lady Hamilton, the wife of the English ambassador, a woman of questionable antecedent but perilous fascination, with whom he was here thrown in contact. The influence which she now obtained over him, she continued to the end to exercise. Early in life he married, and married happily. If to the charms of an impure adventuress he sacrificed, on his return to England, the wife to whom before he had been tenderly devoted, it is not neces-

[CONTINUED ON PAGE 7.]

Grummond's Mackinac Line

STM'R. ATLANTIC,

CAPT. J. R. JONES,

LEAVES CLEVELAND EVERY FRIDAY AT 8 P. M. CITY TIME

For Mackinaw, St. Ignace, Cheboygan Alpena, Oscoda and way ports. For passage or freight apply to MERCHANTS' FORWARDING Co., Agents, dock foot of uperior-st. S. B. GRUMMOND. Owner.

J. R. OLDHAM, C. E.,

Naval Architect,

Marine Inspector.

SPECIAL EXPERIENCE IN DESIGNING, PRICES SELF-TRIMMING HATCHES COAL SHUTES AND BLAKE'S PATENT BOILERS.

32 Exchange Bld.,

BUFFALO, N. Y

ERIE RAILWAY.

The favorite and picturesque route to New York, Boston, and the East. The shortest and quickest route to Pittsburg, Washington and Baltimore, and the southeast.

New Central Depot South Water st. and Viaduct.

Change of time goes into effect March 31, 1889.

Central or ninetieth meridian time, 33 minutes slower than Cleveland city time.

Until further notice trains will leave from the new Central Depot, South Water street and Viaduct, as follows:

DEPART.

No. 62, Mahoning Valley Accom	† 6 00 a m
No. 72, New York Express	* 8 30 a m
No. 72, Fast Pittsburg Express	* 8 30 a m
No. 64, Pittsburg Express	* 3 00 p m
No. 66, Accommodation	* 4 20 p m
No. 68, New York Express	†10 50 p m
No. 68, Pittsburg Express	†10 50 p m
No. 70, Pittsburg Local Express	†11 40 a m
No. 74 Youngstown	† 4 20 p m

ARRIVE.

No. 65, Fast New York Express	*12 50 p m
No. 61, Pittsburg Express	† 7 35 a m
No. 67, Pittsburg Express	*10 55 a m
No. 65, Pittsburg Express	†12 50 p m
No. 6 , New York Express	* 6 50 p m
No. 6 , Pittsburg Express	* 6 50 p m
No. 69, Pittsburg Local Express	† 9 00 p m
No. 73, Mantua Accom	* 7 25 p m

*Daily. †Daily except Sunday.

☞This is the only route by which passengers can reach Cory, Elmira, Binghampton, New York City, and intermediate points without change. No change to Boston and New England cities.

Baggage checked through to all points East.

Through tickets and information regarding the route can be obtained at office, 141 Superior street, and at depot Erie railroad, South Water street and Viaduct, Cleveland.

A. M. TUCKER, Gen. Supt., Cleveland.
L. P. FARMER, Gen. Pass. Agent, New York.
W. C. RINEARSON, A. G. P. A., Cleveland.
M. L. FOUTS, Passenger Ticket Agent, 141 Superior street, Weddell House, Cleveland.

NEW CHART OF THE GREAT LAKES,

Showing the fluctuations of the water surface and rainfall for the past thirty years; also their areas, tides, discharge, etc., compiled from official data obtained from the Lake Survey and War Department, with explanatory notes by
CHAS. CROSMAN, MILWAUKEE, WIS
Price One Dollar. For sale by SHIP CHANDLERS, and sent post paid by
CHAS. CROSMAN, MILWAUKEE, WIS.

From G. Hurson, Secretary and Agent Goodrich Transportation Co.

"Your chart contains valuable information to all marine men for all the lakes, and to all persons doing business on the lake shores and rivers connected with the lakes."

FOR SALE.

A STEAMBARGE OF 167 gross tons burden, built in the year 1886, and worked all the season since she was built, and has been kept in good order. She is now laying at the dock at or near Green Bay, Wis., and capable to do a good business. Will be sold cheap on account of the owner's time being fully occupied with other business. Enquire of. A. W. PRIEST, Kankauna, Outagamicie Co., Wis.

M. M. GLEKLER,

MANUFACTURER & DEALER IN

Cigars AND **Tobacco.**

156 River-st., Cleveland, Ohio

No one should leave port without a box of M. M. Glekler's marine cigars.

FOR SALE.

Two Tugs and Three Marine Boilers.

Tug Uncle Sam.

Length 60 feet, beam 14 feet, depth 7 feet, draft 8 feet, engine 17 by 17; steel boiler 12 feet long, 5 feet 4 inches diameter, of ⅜ths plate, allowed 100 pounds of steam. Hull rebuilt in 1887. Price $3000.

Tug J. C. Ingram,

Length 54 feet, beam 15 feet 6 inches, depth 7 feet, engine 17 by 18, boiler 10 feet long, 5½ feet diameter, of ⅜ths plate, allowed 90 pounds of steam. Rebuilt in 1885. Price $5000.

A Marine Steel Boiler,

17 feet long, 7 feet diameter, allowed 110 pounds of steam, 6 years old, in good condition; price $800.

A Marine Iron Boiler,

14 feet long, 7½ feet diameter, allowed 80 pounds of steam, in good repair; price $400.

Marine Iron Boiler.

14 feet long, 5½ feet diameter, allowed 90 pounds steam, in good condition; price $300.

Apply to

DUNHAM TOWING & WRECKING CO.,
234 South Water St., Chicago, Ill.

Detroit & Cleveland Steam Navigation Co.

Owning and Operating the only Lines of Steel and Iron Side Wheel Steamer on the Great Lakes.

DAILY BETWEEN

(Sunday trips are operated only during June, July, August and September.)

D etroit and Cleveland.

Arriving at 5 a. m., Departing at 9:30 p. m. Connecting with all morning trains in every directio

For MACKINAC, PETOSKEY, CHARLEVOIX, SAULT ste MARIE, AND LAKE HURON PORTS.

Daily except Monday. Wednesday and Saturday.

Offices and Wharfs, 23 River street. City ticket office 224 Bank street.

B. B. WHITCOMB, G. P. A., Detroit, Mich. T. F. NEWMAN, Genl. Agt, Cleveland, O.

FOR

EUROPE!

By all first-class Steamship Lines at lowest ates. Call on or address,

A. J. JACKSON.

00 Public Square, CLEVELAND, OHIO

FOR SALE OR EXCHANGE.

FOR STEAMBARGE, A NEW PASSENGER steamer, will carry 75 tons freight, allowed 115 passengers. Will sell on easy terms or exchange for steam barge. Address, BOX 99, Petosky, Michigan.

E. L. PARRISH,

Ship Chandler,

Sail & Awning Maker.

Sewell & Day's Boston Rope. Boston and Lockport Block Company's patent 5-roller Bushed Blocks.

35-37 Main st., - BUFFALO, N. Y.
TELEPHONE NO 314.

Travelers Information Bureau.

Ocean, Lake and Railroad

TICKET AGENTS

224 Bank St., CLEVELANDO,

J. W. GROVER & SON,

SHIP CHANDLERS,

SAIL MAKERS AND GERS

IMPORTERS AND WHOLESALE DEALERS IN

Wire Rope, Manilla, and Tarred Cordage, Canvas, Blocks, Oakum, Tar, Pitch, Oars, Anchors, Chains, etc.

116 & 119 RIVER ST., & 134 & 135 DOCK CLEVELAND, OHIO.

FOR SALE.

TUG BOAT, STEAM YACHT, &c.

AT

Bell's Steam Engine Works,

BUFFALO, N. Y.

1 new Wooden Tug, 76 feet long, 15½ feet beam; engine 18x20, steel boiler 6 ft. 8 in. by 10 ft. 9 in.

1 steel and iron Steam Yacht 85 feet long, 14 feet 4 inches beam; compound engine 9x18, 12 in. stroke, independent condenser, with boiler all complete.

1 wooden steam yacht, "Little Mac," 60 feet long, 10½ feet beam; engine 8x8, Scotch steel boiler, 2 masts, and furnished all complete.

1 marine engine 10x22.
1 marine engine 14x16.
1 marine engine 14x14.
Apply as above. January. 1889.

SAMUEL McCUTCHEON,

STEAMBOAT & ENGINEERS' SUPPLIES

Copper, Brass and Sheet Iron Manufactory.

IRON PIPE AND FITTINGS.

Agent for Davidson's Steam Pumps, Amazon Boiler Compound, and Orme Patent Safety and Relief Valve.

No. 18 Ohio Street, Buffalo, N. Y.

FOR SALE

TWO MARINE BOILERS 7 years old in good order for sale cheap, 9¼ feet shell by 16 feet long for $1,000 each, ¼ down balance one year, by
C. H. LANE, BUFFALO, N. Y.

FOR SALE.

PASSENGER PROPELLER GOLDEN EAGLE. Thoroughly over hauled this spring, "Sutton" Engine 14×14, 100 pounds steam, runs 14 miles an hour easily, and carrys 00 people. Owner has no route for her and will sell for what she is worth.
JAMES E. ENGLISH
East Saginaw. Mich

FOR SALE.

CENTER BOARD YACHT NORDEN, 42 feet keel, 15 feet beam, 5½ feet head room in cabin, can be arranged to accommodate twelve persons for cruising. Fast and staunch, cost $4,700 to build, will sell if purchased soon for $900. F. W. FINCHER,
Pentwater, Mich.

FOR SALE.

SCHOONER FRANC MINER. Her dimensions are as follows: 68 feet keel, 17 feet beam, 5 feet hold, she has two masts and is three years old, in good shape, outfit and all. I also have a complete outfit for a tug or barge, engine 18 by 20, boiler 6½ by 14, shaft wheel and all complete For particulars write to L. NAU, Green Bay, or CAPTAIN J. A. CUSICK, Fort Howard, Wis.

FOR SALE.

BARGE COL. BRACKET—She carries 260M feet of lumber, 420 tons of coal. Had $900 worth of repairs last season. Fit out good. Price $1,600. Mention this paper. ED. J. KENDALL, Port Huron.

WANTED.

TUG.—A good towing tug, about 18x20 engine. Inquire of CAPT. E. S. SMITH.
No. 30 Twelfth avenue, East Duluth, Minn.

HARBOR TUG FOR SALE.

THE TUG MYRTLE, of Sandusky, Ohio, for sale cheap. Is in first-class condition. For particulars write to FRED GROCH, Sandusky, O.

WANTED—TO BUY TWO TOW BARGES of asbout, 300,000 capacity, or two A 2 schooners. Addres, CAPTAIN A. FLAGSTEAD,
Montague, Mich.

WANTED.

WANTED TO CHARTER TWO TOW BARGES or schooners of about 500,000 or 600,000 capacity for consort for the propeller M. T. Greene. Address CHICAGO LUMBER CO., corner of 35th and Iron streets, Chicago, Ill.

FOR SALE.

HAVING sold our steamer City of Rome we are now offering for sale the BARGE H. R. NEWCOMB. She is well equipped, capacity 50,000 bushels of corn or, 1,350 tons of ore, on 14½ feet draft. She is now lying at Cleveland. For further particulars apply to SMITH, DAVIS & CO., Buffalo, N. Y.

WANTED.

A STEAM BARGE WANTED, capacity not less than one thousand tons. Address, stating price, etc. J. T. MATHEWS,
Toronto, Ontario.

FOR SALE.

A FIRST-CLASS PASSENGER steamer with power to drive her 12 miles an hour; 100 feet over all, 18 feet beam, draws 7 feet of water and carries 100 pounds of steam. Enquire at the RECORD office for further particulars.

FOR SALE.

SMALL SCHOONER, brand new, complete with the exception of canvas and running gear. Length 65 feet over all, beam 17.4, depth 5 feet, tonnage 1.50 Terms $1,000 cash. Address.
MARKHAM & MARKHAM.
Manitowoc, Wisconsin.

WANTED.

A GOOD MARINE ENGINE, 20x22, with or without boiler, etc, Address box 1, branch office Marine Record, 252 South Water st, Chicago, Ill.

FOR SALE.

$4,000 Will buy the tug Eliza J. Redford, of Oswego, N. Y. Length 65 feet, beam 14 feet; non-condensing engine, 13-inch diameter, 19-inch stroke. A decided bargain. Inquire of D. P. LESTER, Oswego, N. Y.

C. E. BLACK,

Dealer in Standard Oil Co's.

CAPITAL CYLINDER OILS

—AND THE—

Finest grades of machine oils.

Sandusky, Ohio.

Marine Record.

Published Every Thursday at 181 Detroit Street, Cleveland, Ohio.

A. A. POMEROY, EDITOR AND PUB

BRANCH OFFICE:
252 South Water Street, Chicago, Illinois,
THOMAS WILLIAMS, Associate Editor.

TERMS OF SUBSCRIPTION:
One year, postage paid.....$2.00
Six months, postage paid..... 1.00
Invariably in advance.

THE MARINE RECORD can be found for sale by the following news dealers:

CLEVELAND, O.—G. F. Bowman, corner of Pearl and Detroit Streets.

Evans & Van Epps, Superior street, Cleveland.

R. A. Castner, 254 Detroit street, Cleveland.

ASHTABULA HARBOR, O.—C. Large.

CHICAGO, ILL.—Joseph Gray, 9 West Randolph Street.

CHICAGO, ILL.—H. B. Hansen, 33 West Randolph Street.

BUFFALO, N. Y.—Miss McCabe, Elk Street, near Ohio.

MILWAUKEE, WIS.—T. S. GRAY, CO. 126 Wisconsin St.

SAULT STE MARIE—J. P. Haller.

ASHTABULA HARBOR—O. M. Kahne.

ERIE, PA.—Reed Caughen, 816 State St.

DULUTH, MINN.—C. F. Johnson, 323 West Superior Street.

MARQUETTE, MICH.—J. A. Vannier.

ESCANABA, MICH.—Wm. Godley.

ESCANABA, MICH.—George Preston.

SARNIA, ONT.—D. McMasters.

OWEN SOUND, ONT.—J. Sharpe, Jr.

KINGSTON, ONT.—F. Nisbet, corner Brock and Wellington Streets.

Subscribers and others are respectfully invited to use the columns of the MARINE RECORD for the discussion of pertinent topics.

Entered at the Post Office at Cleveland as second-class mail matter.

CLEVELAND, O., MAY 2.

CLEVELAND VESSEL OWNERS' ASSN

ORGANIZED IN 1880.

[Membership, 1888.]

Eighty-three steamers, aggregating..... 93,186 tons
Eighty-eight sail and consort, aggregating 54,664 tons

Maintain shipping offices at Cleveland and Ashtabula Harbor. Regulates wages, protects crews, and takes cognizance of all matters in the interests of the members and of the lake commerce generally.

OFFICERS.

H. M. HANNA.....President
H. P. LILLIBRIDGE.....Vice President
B. L. PENNINGTON.....Secretary and Treasurer
H. D. GOULDER.....Counsel

MANAGERS OR ADVISORY BOARD.

H. M. Hanna, M. A. Bradley, P. G. Minch, H. P. Lillibridge, Geo. P. McKay, J. H. Palmer, Thos. Wilson, J. W. Moore, R. K. Winslow, W. D. Rees, James Corrigan, W. C. Richardson.

EXECUTIVE COMMITTEE.

H. M. Hanna, M. A. Bradley, Thos. Wilson, J. W. Moore, Geo. P. McKay.

SHIPPING MASTERS.

A. R. Ramsey, 93 dock, Cleveland; Fred Bennet, assistant, 98 dock, Cleveland; Wm. Reunick, Ashtabula Harbor.

MARINE RECORD—OFFICIAL PAPER.

The Cleveland Vessel Owners' association is prepared to receive applications for admission for 1889, on same terms as last year, viz.: 3 cents per ton on steamers, and 4 cents on sail and consort; old custom house register. The time during which tonnage may be admitted expires May 15th, but it is desirable that all crafts intending to come in should apply before the opening of navigation, and have the benefits of the entire season. Address,

B. L. PENNINGTON, Sec'y.
112 Water St., Cleveland, Ohio.

ROTATION OF WINDS.

A study of the law of storms should be useful, and interesting to many of our readers, and we herewith give a brief sketch, or synopsis of the marked and well known characteristics of the cyclonic storm, referring to Piddington's sailors horn book, or Dove's law of the gyration of the wind, or any other standard work, to any one requiring a more elaborate explanation. While it is generally admitted by all authorities that moderate gales of wind travel over and expend their fury within a circle of 700 miles, such cannot be said of the cyclone, or in western parlance, blizzard, and in this connection we may say that the name changes only on account of the geographical position and the typhoon of the China seas might appropriately be called a pampero if blowing on the east coast of South America, and the cyclone of the Bay of Bengal, or Indian Ocean, be named a hurricane in the Atlantic, while their characteristics are essentially cyclonic. Hence, we infer that the word cyclone covers the various terms in use over the globe. While admitting that there are local features to be considered marking the geographical location of the storm, yet the direction, velocity, etc., are similar. The cyclone has a double motion, rotary, and progressive, and moves in the northern hemisphere from right to left, or in a direction against the hands of a clock.

In the Southern hemisphere the opposite movement is according to the law of storms, and the rotary motion is from left to right as a person would read, or as the hands of a clock revolve. The center of a cyclone bears about eight points from the direction of the wind, and to the right in the northern hemisphere, but to the left in the southern hemisphere, while the line of progress, that is, the line on which the center of the cyclone moves is the central track of the storm. Authorities seem to coincide with the view that the rotary motion increases the effect of the progressive motion in the semicircle, which is to the right of the central track, decreasing in that semicircle which is on the left of the same line; and to illustrate this seeming paradox it is said that if a line be drawn through the center, at right angles to the central track, then at any point on that half of it which is on the right of the central track, the effect of the wind is equal to the sum of both the rotary and progressive motions, but at any point on the other half, the effect is the difference of their motions, and in this case it may be clearly seen that the wind in the right hand semicircle rotates with and gains velocity on account of its pursuing the same path as the progressive motion, while in the left hand semicircle the velocity of the wind, so far as regards its rotation must be decreased by the amount of the progressive force as the path is opposite to that of the axis, or progressive motion. An observer wishing to know on which side of the central track he is located, may note the direction of the wind at short intervals, then if the wind veers to the right (the observer being supposed to face the wind), he is in the right hand semicircle of the cyclone, but if it veers to the left, he is situated somewhere in the left hand semicircle of the storm. Therefore in heaving a vessel to, she ought to lay in the starboard tack when in the right hand semicircle of the storm, and on the port tack when in the left hand semicircle, while if the observer is on the central track, the wind will blow directly and constantly from one-quarter of the compass during half of the duration of the storm, accompanied by hard squalls and a falling barometer. As the center of the cylone approaches the place of the observer, several effects may be noted among which may be mentioned a rapidly falling barometer, sky dark and threatening, wind increasing in weight, and squalls more frequent, but as the center recedes from the place of the observer, the barometer rises steadily, and the weather gradually moderates.

In the recent loss at Samoa, we believe that the baromter indicated an approaching storm for the space of twenty-four hours before the center had passed over the vessels, and knowing that the holding ground was bad, or at least indifferent, if the vessels had got under way, when the warnings were distinctly visible, the loss of valuable life and property might possibly have been averted.

INTERNATIONAL MARITIME CONFERENCE.

The international maritime conference to be held in Washington, October 6, 1889, is principally in the interests of the merchant marine, and any correspondence addressed to S. R. Franklin, rear admiral, United States navy, who is president of the board of American delegates, will receive the closest attention. Lake masters and pilots would do well in ventilating any matters which they may consider worthy the attention of the delegates. Already several subjects have been arranged, and a detailed programme completed for transmission to the powers who will participate in the consideration of subjects coming before the conference. That the international conference will be a representative one is clearly shown by the list of nations that have signified their intention of sending delegates to the convention. The department of state is also in receipt of a dispatch from the Mexican government, dated April 10, saying that Mexico has accepted the invitation, and will be duly represented at the conference. The questions to be brought under discussion have been arranged in divisions, and are numbered respectively as follows: 1. Signals for denoting the direction in which vessels are proceeding in thick weather or at night, and a revise of the steering and sailing rules. 2. To determine the seaworthiness of all vessels. 3. Load line. 4. Lettering, name, port of hail, and draft marks. 5. Lifeboats, life saving apparatus and appliances, inquiring into the causes and circumstances of shipwreck, and other casualties. 6. Certificates of competency. 7. Ocean lanes. 8 Supplementary night signal code. 9. Meteorological weather forecasts. 10. Obstructions to navigation. 11. Lighthouse information, and the best method of issuing notices to mariners. 12. A uniform system of buoyage. 13. The establishment of a permanent international maritime commission.

From the foregoing it may be said that the conference will have the most important matters, connected with the mercantile marine, under consideration; hence, it behooves practical men, who are adding daily to their experience, to correspond with the chairman, or any of the members of the United States delegation, with a view to offering suggestions on matters relating to actual experience, and on present systems if any, which are at variance with the true interests of their community.

The international marine conference can not fail to work a vast amount of good to the service; yet, if valuable suggestions were offered by seamen, much clearer and more useful results would probably be obtained, and in this connection we are rather at a loss to know how the conference will obtain the mass of evidence necessary to determine the advisability of altering the present well known rules and regulations; nor do we think there is a sufficient element of the mercantile marine in the commission. The alterations to be made, chiefly concerning that class, there ought surely to have been a better representation in the conference, but, of course, experienned men from ocean, lake, and river could be summoned to give evidence as the different subjects were brought forward, and no doubt this system will be carried out in a greater or less degree during the month of October.

We expected to find the Semaphore system of signalling given due attention, especially for lake and cost service. Certainly there is no better method of distant siguals yet devised. The seaman's dietary system, as at present authorized ought also to be revised, and the contract entered upon between the seaman and masters be declared void after an oversea voyage, instead of binding men down to service, willing or unwilling, for periods ranging from six months to three years, as is the case at present. In section 3, relating to the discipline of crew, no one-sided view ought to be allowed, but the opinion of intelligent a. bs. given full weight and credence, as opposed to the views entertained and frequently expressed in forcible language by officers of a ship. While freely admitting that the strictest discipline must be maintained on board a vessel, yet the American seaman must not be considered as purchased mentally and physically by the master, even for a definite period.

MUTUAL INSURANCE.

We were not without hopes that the present season would have witnessed the commencement of the mutual insurance system among our vessel men. Our advocacy thereof has been consistent throughout, and that it has failed to commend itself to the owners of craft is no proof that we were wrong. We would rather say that these, the most interested parties, are the greatest losers through their own shortsightedness.

It would be difficult to say why the vessel owners have not given this movement the support they, in many cases, so readily promised. They appear to have willingly ignored the fact that, if anything was to be done, they must all unite, but, by playing with their friends they have succeeded, for the time at least, in wrecking the ship, and we cannot congratulate them on the result of their action.

The insurance companies are in this position, either they make money out of hulls, or they do not. If they make a profit, then we say that the owners would, by adopting the mutual system, retain that profit for themselves, and the experience of trans-atlantic owners proves that they save considerably by mutually insuring. If, on the other hand, the companies do not make anything, why, we would pertinently ask, are they so anxious to insure hulls? They certainly are anxious to get them on their books if the owners will pay the fancy prices they ask, and by way of consoling the latter for these extortions they assure him that they are taking the risk merely to oblige him, and that they are losing heavily on the transaction.

Though we prefer that our readers should draw their own conclusions from these facts and figures, we cannot refrain from calling attention to the proportion of losses to tonnage in the Chicago Vessel owners' association. Last year out of a total of 160 vessels, mostly schooners, there was one loss and little, if anything, in the shape of averages. Supposing this season to be three times as severe as last, the total cost of their insurance on the mutual plan would be about 3 per cent. Last year it was, therefore, about 1 per cent. Let our owners compare these figures with those they have been paying

NEW TONNAGE.

LIST of merchant vessels built on the chain of lakes to which official numbers were assigned by the Bureau of Navigation Treasury department during the two weeks ended April 20, 1889: Steam vessels, Frontenac, Cleveland, O., official number 120,750; tonnage, gross 2003 68, net 1676 07. City of Detroit, Detroit, Mich., official number 1265.46, tonnage, gross 1919.27, net 1454. Dixie, Detroit, Mich. official number 157,240, tonnage, gross 14 67, net 7 34. Juliet, Chicago, Ill., tonnage, gross 61 09, net 44.12. Jeanie, Detroit, Mich., official number 76,796, tonnage, gross 172.63, net 129.41. M D. Moore, Milwaukee, Wis., official number 92 083, tonnage, gross 105.85, net 52.96. Niko, Detroit, Mich., official number 130,439, tonnage, gross 782.22, net 684 80 Osceola, Sandusky, O., official number 155,159, tonnage, gross 14.51, net 7.26 P. J Ralph, Port Huron, O., official number 150,460, tonnage, gross 964.97, net 658.59. Romeo, Chicago, Ill., official number 110,815, tonnage, gross 61.09, net 44.12. Topeka, Milwaukee, Wis., official number 145,510, tonnage, gross 1376 17, net 1111.08. W. W. Neff, Milwaukee, Wis., official number 81,209, tonnage, gross 69.70, net 44.27. John Plankinton, Milwaukee, Wis., official number 76,798, tonnage, gross 1821.85, net 1461.35. Marian, Port Huron, Mich., official number 92,084, tonnage, gross 17.59, net 8 80. Neshoto, Cleveland, O., official number 130,440, tonnage, gross 2255.11, net 1904.58. Phil Sheridan, Buffalo, N. Y., official number 150,462, tonnage, gross 35.28, net 17.64. Samson, La Crosse, Wis., official number 116,260, tonnage gross, 38 07, net 38.07.

The only sail vessel is the Faugh-a Ballagh Sandusky, O., tonnage, gross 35.22, net 33.47. The total showing for the two weeks ending April 20, 1889, amounts to eighteen steam vessels with a gross tonnage of 11,714 or a mean tonnage for each vessel of 650 tons and one sail vessel only with a gross tonnage of 61 32.

NOTICE TO MARINERS.

LIGHTHOUSE POINT.

Buoys have been placed off the point of the Island to mark the bank to the S. and S. W. of the lighthouse point as follows: One iron can buoy, No. 2, painted red, with black ring on the end, the point lighthouse bearing from it N. W. by N., ¾ N.; a bell buoy (red) No. 4, the lighthouse bearing from it N. W. W., ¾ W.; another can buoy (red) No. 6, the lighthouse bearing from it N., ¾ W.; another can buoy (red) No. 8, the lighthouse bearing from it N. by E.; another can buoy (red, with white ring round it and white ball on the end,) No. 10, the lighthouse bearing from it N. E., ½ E.; a spar buoy, painted red, stands on the N. W. point of the bank which bears from the can buoy with white ring and white ball on end N. W., ½ N. The light house bears E. N. E., and the cupola of the central prison N. W. by N., ¾ N. The can buoys are placed in 8 fathoms of water, and the spar buoy in 17 feet. It is not safe for vessels to go inside of them, as the bank rises very abruptly. An additional spar buoy, painted red, has been placed on the N. W. point of the Island in 17 feet of water.

WEST CHANNEL.

A red buoy at the entrance stands in 11 feet of water, the lighthouse bearing from it N. by E., and distant 437 feet. All the buoys on the south side of the channel are painted red, and are put round the face of the bank in 9 feet of water. One black buoy stands on the north side of the channel at the entrance, the white lighthouse bearing from it N. E. by E. ½ E., and distant 750 feet. There is 12 feet of water in mid-channel.

EAST CHANNEL.

The buoys in the east channel are placed thus: Two black spar buoys on the west or port side, coming into the bay, and two red spar buoys on the east side or starboard side. There is 4 feet 6 inches of water in mid-channel between the buoys. Landmarks on coming into the east channel are: The cupola of the St. Lawrence hall, and the line with steeple of the Methodist church (with the four spires on top) on Church street. The course by compass coming in is N. W. and by N. A black spar is placed on the boiler to the south of the gap. Vessels should not go to the north-west of it. The water at this date is 12½ inches above zero.

In the above the statement is made that the water at a certain spot is 12½ inches above zero. Vesselmen have a most dense ignorance of the meaning of the word zero in this connection, and there is not one who can calculate the depth of the water from that statement. One captain suggests that a diagram be published explanatory of the word zero.

From and after the opening of navigation this year a red sector will be shown in the light on Nottawasaga Island, Georgian Bay, Ontario, over an arc of 30 degrees, from Fisherman's point southwesterly, covering the whole of Collingwood harbor and the dangerous shoals between Nottawasaga Island and the harbor. Vessels approaching Collingwood harbor from the northwestward should keep the breakwater pier light well open northeastward of Nottawasaga Island light to clear the Mary Ward ledges, and after passing Nottawasaga Island should keep north of the red sector, with the white light in sight, until the breakwater light bears southwest when it should be steered for on that bearing.

Vessels leaving Collingwood should steer northeast from the breakwater pier light until the red sector of Nottawasaga Island light changes to white, when they may haul to the northwestward.

Caution—Masters of heavy draught vessels must remember that in addition to the continuous rocky bank connecting Nottawasaga Island and the breakwater pier, for the avoidance of which this red sector has been established, there exists two reefs with twelve and thirteen feet of water on them, the former being known as Lafferty's Home, bearing east by south one fourth south two miles, and the other called George Rock, lying east by north three-fourths north one-third of a mile from Nottawasaga Island lighthouse.

THE list of merchant vessels built on the great lakes to which official numbers were assigned by the bureau of navigation treasury department, Washington, D. C., during the week ending April 27, are as follows: Steam, Huron Belle, Port Huron, Mich., official number 96 001, tonnage, gross 23 50 net 11 75. Jessie Enos Cleveland, O., official number 76,801, tonnage, gross 13.41. Manchester, Detroit, Mich., official number 92,087 tonnage 2132 85 net 1611 29. Reindeer, Buffalo, N. Y., official number 110817, tonnage, gross— net 7 83. Sport, Detroit, Mich., official number 116,261 tonnage, gross 9.37 net 5.55.

MANY vessel men grumbled at the low stage of water last year, but it will probably be still lower this year. For the month of March it averaged 35-100 of a foot, (a little more than 4 inches) lower than for the same period last year at Milwaukee.

The total ore shipments from Escanaba since navigation opened up to Saturday was 54,313 tons—an unparalleled record.

LAKE CARRIERS' ASSOCIATION

TO CONSIDER AND TAKE ACTION UPON ALL GENERAL QUESTIONS RELATING TO THE NAVIGATION AND CARRYING BUSINESS OF THE GREAT LAKES AND THE WATERS TRIBUTARY THERETO, WITH THE INTENT TO IMPROVE THE CHARACTER OF THE SERVICE RENDERED TO THE PUBLIC TO PROTECT THE COMMON INTEREST OF LAKE CARRIERS AND PROMOTE THEIR GENERAL WELFARE.

BOARD OF MANAGERS, 1889.

THOMAS MARTIN.....Oswego, N. Y.
JAMES ASH.....Buffalo, N. Y.
W. BULLARD.....Buffalo, N. Y.
S. D. CALDWELL, President.....Buffalo, N. Y.
E. T. EVANS.....Buffalo, N. Y.
W. P. HENRY.....Buffalo, N. Y.
P. P. MILLER, Vice Pres.....Buffalo, N. Y.
FRANK J. FIRTH, Vice President.....Erie, Pa.
M. A. BRADLEY.....Cleveland, O.
H. M. HANNA.....Cleveland, O.
THOMAS WILSON, Vice President.....Cleveland, O.
A. W. COLTON.....Toledo, O.
WM. LIVINGSTONE, Jr.....Detroit, Mich.
EBER WARD.....Detroit, Mich.
JAMES DAVIDSON.....Bay City, Mich.
JOS. AUSTRIAN.....Chicago, Ill.
W. M. EGAN.....Chicago, Ill.
IRA H. OWEN, Vice President.....Chicago, Ill.
R. P. FITZGERALD.....Milwaukee, Wis.
DAVID VANCE.....Milwaukee Wis.
LEX McDOUGALL.....Duluth, Minn.
FREDERICK ALMY, Secretary.....Buffalo, N. Y.
JAS. CARRY EVANS, Treasurer.....Chicago, Ill.

MARINE RECORD—OFFICIAL PAPER.

A WINTER BRIDGE?

Special Correspondence to the Marine Record.

A meeting of the board of managers of the Lake Carriers' Association was held April 26, 1889, in the committee rooms of the Merchants' exchange, Buffalo, to take final action as to the hearing before the board of army engineers, May 1, at Detroit, on the question of a winter bridge over the Detroit river. All the local managers were in attendance, with President Caldwell in the chair.

It was voted that William Livingstone, Jr, of Detroit, one of the board of managers, should represent the association at the hearing and look out for its interests. A careful statement of the objections of the association to a bridge over the Detroit river was presented by the secretary, and was adopted and ordered printed for use before the board. As General Poe had expressed a preference that the arguments should be in writing, the managers decided to send no delegation to Detroit, and to employ no attorney to represent it at the hearing.

Other business of less importance was transacted.

SECRETARY.

FORE AND AFT.

Water is more abundant than at first. But it isn't any more popular.

The Kathleen was the first steamer through the Cornwall canal. The John A. Macdonald was the leader last year on the 1st of May.

"Oil on troubled waters" has proved to be so efficacious that mariners have begun to provide cans of oil and oakum bags to be used against the waves.

The back range light tower at Weller's Bay has been moved 37 feet westwardly so as to bring the two lights in line with the extremity of the split of Bald head.

The stock piles of the Marquette ore company, near Ishpeming, are said to contain half a million tons, from which 75 cars will be shipped each day during the present season.

Captain Collier begins Tuesday blowing up with dynamite the old war ship St. Lawrence, sunk at Morton's distillery over fifty years ago. He expects to recover a large quantity of copper, brass, and iron.

The steamer Junita, owned by Jas. Ratray, Grindstone Island, and used as a ferry between Gananoque and Canton, was launched on Wednesday after having been thoroughly rebuilt. She has had full sides put on and is now 12 feet beam.

Captain Wissman complains that the grant by the German government of 2,000,000 marks is not sufficient for his African expedition. It begins to look as though Wissmann was an explorer for revenue only.

After an intrepid fight Senator Laughlin has had passed an amendment to the canal bill increasing the appropriation to $750,000. Final action upon the bill will be awaited with interest by all friends of the bill.

The new drydock of the Chesapeake drydock and construction company was formally opened at Newport News when the monitor Puritan was docked. The dock is the largest by far in the United States, being 600 feet long.

The orders for the Richmond to proceed from the mouth of the La Platte river, South America, to Samoa, have been countermanded, and the work on the Adams, now at Mare Island, and which was also to have gone to Samoa, will not be pushed with such expedition.

THE attention of our readers is invited to the advertisement of Crosman's new chart of the great lakes. The chart is highly commended by the best authorities on marine matters. It shows at a glance the monthly variations of the water surface for so long a period, that it enables one to judge quite accurately what probable fluctuations will occur in the future.

Captain Alfred Conklin, who died at Peekskill on the 21st, at the age of sixty-seven years, was one of the oldest steamboat men on the lower Hudson. He was the pilot, at the opening of this season, of the steamer Carystenah plying between that village and New York city. He had been her pilot for a number of years. Two weeks ago he was taken with pneumonia. He leaves a widow and a family.

AROUND THE LAKES.

[CONTINUED FROM PAGE 1.]

CHICAGO, ILL.

Special to the Marine Record.

Last Friday morning James Russell, a sailor, was killed while engaged in rigging the schooner Eagle Wing, laying at a dock just below the Chicago dry dock company's dry dock, between Harrison and Van Buren streets. Russell missed his footing and fell off the crosstrees, falling a distance of over eighty feet fracturing his skull and breaking many bones in his body. He was taken to the county hospital, but survived only one hour. He was 28 yeas of age, and was born at Kirkwall, in one of the Orkney islands, where his relatives live. He sailed out of Krikwall several years ago with Captain Tom Randall, who commands the Eagle Wing. An inquest was held on Saturday, and a verdict of accidental death was found. His brother, who lives at 379 east Division street, took charge of the body which was buried on Sunday.

Crosby & Macdonald received a dispatch Saturday that the schooner Ganges was ashore near Cape Vincent, Lake Ontario.

The steamship Gladstone, Captain H. W. Stone, arrived here from Buffalo with coal, last Friday, about noon. When just above Skillagalee she struck a log and knocked two buckets off her wheel, and loosened her shoe. She went into one of Miller Brothers, dry docks Monday, for a new wheel, and repairs to her shoe. The steamchip A. P. Wright, will go into dry dock after her for two new buckets to her wheel.

The steambarge White and Friant, was in one of Miller's docks for recalking.

The steamer Lawrence of the Northern Michigan line, left Chicago Monday night on her fourth trip this season, for Mackinaw and Cheboygan, and intermediate ports. The Lawrence was the first steamer to arrive at Cheboygan from this port this season, and has already done excellent business.

Captain David Dall has given his schooner Lincoln Dall a new mizen mast, and converted her into a three and after, which has much improved her appearance.

The steambarge Wm. Edwards and barge Golden Age, left this port Monday evening with corn for Buffalo.

The Pewaukee, which has been converted into a steambarge during the winter by her owners, Leatham & Smith, at Surgeon Bay, having received a pilot house and texas, and an engine 22 by 22, arrived here Sunday night in command of Captain C. B. Packard, formerly of the steambarge Sam Neff.

The steamship B. W. Blanchard, owned by Parker & Millen, Detroit, and chartered to the Vermont Central line, arrived here on her first trip Sunday morning from Ogdensburg. The rebuild she received at Springwells last winter has improved her greatly, her wooden arches having been taken out and replaced by steel arches running under the rail; her upper cabins were also taken off and replaced by new ones forward and aft, and five hatchways put on her upper deck; her boiler placed on deck and three new masts put in her. Captain H. W. Bogart is in command; Frank Typo chief engineer.

The steambarge Manistique, with consorts Angus Smith and Emma L Coyne, arrived Saturday morning with 1,570,000 feet of lumber from Oscoda.

The schooner Norman has received new pawl posts, hawse pipe, sole pieces and her deck calked and general repairs

The tug Mayflower has been sold by Captain H. Dahlke to a bridge contracter at Memphis. Consideration, $7,500. Captain Dahlke left here with her for Memphis last Thursday.

The tug Wm. Rollar of South Chicago, was sold last week by Hausler Brothers to the contractors for the Calumet river improvements. Consideration $4,500 cash.

Hausler Brothers, South Chicago, have chartered the tug E. E. Rice, owned by Wm. R. Kuehle, of Chicago, to take the place of the Wm. Rollar until their new tug building by James Elliott, Saugatuck, shall be completed and put in commission in July next.

The tug Fashion, recently built by John Gregory for Captain Ed Napier, has been sold to the United States government. She is of the composite type, and will make 12 miles per hour. She is to be used by the government engineering department at Detroit. John McGraw, son of the late Ed McGraw ship joiner, who built her pilot house and enging room, is placing on her a new cabin aft, 11 by 16, with three berths, bath room and closet, finished in hard wood, for the officers. Also four berths forward in the forecastle, and two closets for the surveyors.

The schooner Cascade, Captain Edwards, laying at a dock in the North Branch, just below North avenue on the west side of the river, was last week run into by the propeller Josephine and badly damaged. The Josephine struck her just abaft the fore rigging, crushing in her side, deck beams and deck and center board box, in fact almost knocking her clean out. The Cascade was built in 1853 by G. W. Jones at Black river, and is therefore not a spring chicken, although very tender for her years.

The L. M. & L. S. transportation company's steamer Peerless left Saturday night last for Duluth. The City of Fremont leaves Wednesday, and the City of Duluth Saturdry next.

The steambarge May Durr, owned by the John Spry lumber company and Captain G. W Flood, who commands her, arrived here from Buffalo, where she was laid up last winter. She left Buffalo on April 11th, was delayed by the jam at St. Clair Flats for a week. She went to Cheboygan and loaded 650,000 lumber and went to Manistique for her consort the John F. Johnson, laden with 730,000 lumber. The Durr with 33,000 bushels corn, and consort Johnson with 32,000 bushels of corn left this port for Owen Sound Monday evening. Captain Flood says the Durr carries a very large cargo on a light draught of water, and is a very small fuel consumer, and a success in every way.

The splendid new steamship John M. Nicol, recently built by F. W. Wheeler, Bay City, for Ward's Detroit and Lake Superior line, arrived here Friday morning, with salt from Bay City. She loaded 75,000 bushels corn for Buffalo and would have left this port Monday evening, but for an accident which befel her as she was coming down the river. As she was passing the lumber market which was very full of vessels, the tug Success, running across her stern collided with her rudder striking it so hard that the quadrant of the Nicol's steering gear was broken off close to her rudder post. The Nicol is in command of Capt. Albert Stewart, and R. Hill is chief engineer

The Chicago board of marine underwriters met yesterday and adopted the following schedule of rates on grain: To ports on Lake Michigan, 25 cents; on Lake Superior, 35 cents; Huron, Sarnia, and Detroit river, 25 cents; Georgian bay, 30 cents; Lake Erie, 30 cents; Ontario, 45 cents; to Ogdensburg, 50 cents; to Montreal, 75 cents.

The steamship John B. Lyon arrived here last Thursday with coal from Buffalo, and as she was drawing 15 feet 2 inches water, she was lightered of 300 tons of coal by the schooner Coral. Friday night about ten o'clock she stuck on the bottom just above 16th street, and remained there until eleven a. m. Saturday, when she was released, but when at South Halsted street bridge, she got on again, and remained until four p. m. Many vessels were delayed by her, and vessel men hope the Perew fleet will take their loss of time and therefore of money into consideration, and not bring along such heavy loads.

Captain John Prindiville jr., died at his home in this city on Friday last from Bright's disease, from which he had been a great sufferer during the winter. He was a son of the well known Captain John Prigdwille of this port, and had been for several years wrecking master for the insurance companies represented by his much esteemed father.

WILLIAMS.

MARINE CITY, MICH.

The following is a list of the vessel captains hailing from this port, together with the name of the boat which they will command during the season of 1889: Steamers, Darius Cole, John Robertson master; City of Mackinac, Matthew Lightbody; Mary, S. H. Burnham master; New Baltimore, John Lozen master; Northern Queen, Joseph P. Cottrell master; Ira H. Owen, J. Q. Owen master; A. L. Hopkins, Walter M. Cottrell master; Edward Smith, Alfred Mitchell master; Bay City, Richard O'Connor master; A. A. Turner, W. H. Scott master; Abercorn, James Leitch master; S. C. Clarke, Cassius M. Saph master; M. Sicken, John Kuhn master; Marshall, Joseph Shackatt master; Kate Buttironi, Chas. E. Norton master; C. F. Curtis, Robert Gains master; Delaware, Thos. Pringle master; Nashua, Wm. H. Brown master; Harry Cottrell, Phillip Rice master; Monahansett, Henry Donaldson master; Aztec, Jas. Taylor master; Lousiana, Tyler Morley master: R. L. Fryer, Myron Parsons master; D F. Rose, George Phelps master; Miami, John Hagan master. Schooners and barges, Buckout, Jas. Hall master; E J. McVeigh John Balfour master; Buckeye State, Ramer Bell master; C. Spademan, Matt Scott, master; Albany, Andrew B. Scott master; Troy, Jefferson Williams master; Owasco, E. M. P. Titus master; M. Buttman, Henry Balfour master; Teutonia, Harry Lawrence master; S. E. Marvin, John C. Hazen master; R. L. Fryer, Wm. Crocker master; St. Joseph, Wm. Meldrum master; Maria Martin, Wm. Rouvel master; Wm Brake, Alfred Meswald master; Montpelier, Julius Rodgers master; C. L Young, Jas Coble master; Winona, John Jones master; Dayton J. A. Ward master. Str. Tempest, Geo. Lester master. Sch Jane Rawlson, Henry Lester master; Isabel Reed, Jas. Cunningham master; N. C. Holland, Jas. Barrett master; Kate Braiuard, John Angel master; Levi Rawson, Jos. Rose master; T S. Fassett, Alfred Renders master; Holland, Geo. Gains master; Orton, W. H. Burton master; J. R. Edwards, Wm. Barrett master; W. A. Young, Thompson master; Marine City, Nap Blair master; Boscobel, John Boclair master; Maze John Morrison master; Casey, Alex Clifford master; W. A. Axford, Wm. Campbell master; Nahant, Michael Fitzgerald master; Strs. Oswego, Wm. Smith master; E. S. Pease, John Sterling master; Thos Gawn, Frank Cottrell master; W. H. Barnum, W. McGregor master. Schooners, T. T. Co.'s new, Wm. Brines master; Pawnee, David Davis master. Steamers, P. J. Ralph, John C. Pringle master; Sea Gull, Joseph C. Miller master.

PORT HURON, MICH.

Special to the Marine Record.

The tug Hurculess arrived here Monday with the disabled schooner White Star which was ashore on south point. She will be placed in Dunford & Alverson's dry dock for repairs.

The schooner Geo. Clinton received a new Providence windlass and other repair at the same yard.

A Swedish sailor by the name of Thompson was drowned off the schooner E tell in tow of the tug Brockway, just above Marine City. He was scrubbing over the quarter outside when he lost his balance and fell over board. He shipped in Chicago on the 22nd.

The Geo. L. Colwell received her new crank at the Phœnix Iron works Monday.

The schooner Montgomery, the steam barge Tempest and tow arrived here with coal this week.

The tug Castle received her new boiler and left Monday for Black River to tow a raft. She is allowed 120 pounds of steam.

Captain Buzzard is fitting out his schooner Orkney Lass at Fitzgerald's dock.

The steam barge City of Mt. Clemens run aground on the head of Stag Island Sunday morning. She was released shortly after.

Captain Tebo and Co.'s new coal dock is completed. They will keep all first class coal, steamers can coal at this dock with ut having to let go their tow. There is 20 feet of water at this dock.

The schooner H. Ross is in Dunford & Alverson's dry dock for repairs.

Lynn the marine reporter is building an addition to his office.

The new steambarge Pawnee left here Monday on her maiden trip. She is a fine looking boat. She will tow the barges Edwards, Young and Orton formerly of the T. S. T. Co.

The Gettysburg and Torrent towed the first raft of the season past this port.

The Grand Trunk railroad have contracted for the delivery of thirty thousand tons of coal to be delivered this season by boat.

Isis.

WEST BAY CITY.

A fine steamer, built here for P. D. Armour and W. M. Egan, of Chicago, and R. P. Fitzgerald, of Milwaukee, was launched last Saturday at 11:30 o'clock. She is named the John Plankinton, after a popular citizen of Milwaukee. She is 265 feet long on the keel and 40 feet 6 inches beam, with a molded depth of 23 feet. Her custom house measurement is 1,461 tons. She is bound together by steel cords and steel diagonal strape, and has beside a steel shelf piece 42 inches wide and ¾ of an inch thick, and two steel keelsons 30 inches deep and ¾ of an inch thick. Her upper deck frames are strapped diagonally with steel 5 inches wide and ⅝ of an inch thick. The Plankinton will have steam steering gear, Providence steam windlass, from the American ship windlass company, Providence, R. I., and steam capstans forward and aft from the same firm. Her engines were built by H. G. Trout, of Buffalo. They are of the compound type with a 28-inch high pressure cylinder, a 52-inch low pressure cylinder, and a stroke of 42 inches. She will have two boilers, built of ¾ inch steel, each 9½ feet in diameter and 14 feet long. They will afford a steam pressure of 130 pounds. The Plankinton has an iron boiler house, and her cabins are built of hard wood with oil finish. She is of superior model, and in point of construction and outfit is the peer of the best wooden steamer afloat on the lakes. She will hail from Milwaukee.

OSWEGO, N. Y.

Special to the Marine Record.

The trim steam yacht Charlotte, from Charlotte, Captain John Dowd, has arrived here to go on dry dock to have shoe fastened and calking.

The tug E P. Ross, of Fair Haven and the yacht Rhoda, were on Goble & McFarlane's dry dock last week.

The tug John Navagh looks fresh in her coat of paint. Captain Wm. Scott pulls the bells and Tom Navagh answers them, for the season of '89.

Sailors' wages $2 per day here.

The light-house at Charlotte has been moved to outer end of west pier and a new shore light-house is to be built on the shore end of west pier, which will be about sixty feet above the water, as a coast and range light, it will be welcomed by the navigators

The barges Sherman and Mills loaded coal at Charlotte for Chicago last week and got away. The steamer Hecla picks them up at Port Colbourne; they are in the Ogdensburg line this season.

Captain Ryan, of Buffalo, the owner of the burned propeller Lake Ontario, is going to rebuild her at once at Charlotte.

The tug Wm. Avery, Captain Patrick Tirnan goes to Cleveland to tow for Donnelly, the contractor at the breakwater.

The tug M. J. Cummings, Captain T. Donovan, comes out this spring with a new shaft and engine overhauled.

Captain John Bass goes to Charlotte to run the City of Rochester, Richard Langer engineer.

The coal shipments from Charlotte are large so far this month. Several large shipments have been made this week to upper lake ports.

The Rochester, Pittsburg & Buffalo railroad are to ship the coal by rail that went by water to Ogdensburg last season.

The steamer Norseman is now running daily between Charlotte and points on north shore.

L.

DULUTH MINN.

The nearest Lake Superior port to the Apostle islands, where James Corrigan's steamer Australasia and consort George are ashore, were not encouraging to people interested in the boats. The wreckers were compelled to remain at Bayfield all day on account of a northwest wind. The location of the boats on Michigan island is not known here, but it is more than probable that they suffered somewhat from the weather.

The coal heavers have been in session all day long at the Knights of Labor hall, considering ways and means to get the higher prices wanted by the West Superior coal men for dock work the coming year. The Superior strikers gave their cause of grievances, and speeches were made to the effect that the men should receive 50 cents an hour instead of 40 cents on both sides of the bay. Over 200 men were crowded into the hall. A committee was appointed to meet the coal dealers of Duluth so ascertain what would be paid. The price agreed upon will regulate the rate at the head of the lake. If the companies here do not agree to a higher rate than now given at West Superior a strike will probably take place, for the men will not work for 40 cents, being led to that decision mainly by their Superior brethren.

GRAND HAVEN, MICH.

At 2 o'clock Monday afternoon George Walker, a young man of this city, was very seriously, perhaps fatally, stabbed by Jerry McCarthy, late steward of the steamer Wisconsin, running between this port end Milwaukee. Both men were more or less under the influence of liquor, and meeting in a saloon came to words, followed by blows, resulting in the stabbing of Walter four times in the abdomen. McCarthy is still at large.

The propeller J. C. Ford was launched yesterday from Mechanics' shipyards. She was built for T. W. Kirby. Her dimensions are, length 187 feet, beam 33 feet, depth 12½ feet. She has fore and aft compound engines by Samuel F. Hodge, of Detroit, 36 x20x30 inches stroke, and a steel boiler by Johnson, of Ferrysburg, 9 by 15 feet. The Ford will carry 1,000 tons and will run in the ore trade from Escanaba to Fairport.

EAST SAGINAW, MICH.

The shipping season in the Saginaw river opened earlier this year than at any time since 1884. At the beginning of spring vessel owners seeing that there was to be an early opening of navigation, undertook to bring about an arrangement by which loaded vessels should not leave port before April 25. This agreement was generally signed by the owners of vessels engaged in the lumber carrying trade, but the agreement was broken. Boats began loading in the early part of the month, although it was said that they were to remain at their docks until the 25 h. Vessel owners at the ports below hearing that certain crafts were loading here, contrary, as they claimed, to the agreement, fitted out their barges and started them for the river.

The pay of longshoremen is 45 cents per hour, the same as last season. No special arrangement was made with the men, it being taken for granted that the prices paid last year would rule this season.

Shipments from the Saginaw river during the month of April were: East Saginaw, lumber, 7,744,000 feet, and Bay City 21,187,000 feet.

BUFFALO, N. Y.

Captain Woodward writes this to H. G. Trout & Co. that the steamer S. G Rosamond of Cedar Bay with 80 pounds steam on does as good work with Trout wheel as they done with old wheel with 100 pounds and also do it with less coal. Also does better towing. H. G. Trout has made and sold 118 of his propeller wheels since January 1st., 1889.

The May supplement of the Inland Lloyd Vessel Register is out ahead of time. It contains the names of eight new propellers and one barge, as follows: Propeller Philip D. Armour, 1,453 tons, $130,000, owned by Fitzgerald and others of Milwaukee; Cayuga, tonnage not given, $250,000, owned by the Lehigh Line of Buffalo; Frontenac, 1,677 tons, $180,000, owned by the Cleveland I. M. company; John E. Hall, 279 tons, $30,000, owned by Samuel Hall of Manitowoc; Joe, 31 tons, $8,000, owned by T. W. Kirby of Grand Haven; Niko, 685 tons, $75,000, owned by Comstock and others, Alpena; George W. Roby, 1,470 tons, $128,000, owned by Roby and others, Detroit; barge Mary A. McGregor, 600 tons, $12,000, owned by Monroe and others of Grand Haven. The barge M. I. Wilcox, comes out as a schooner rating A 2 and valued at $10,000. The valuation of several propellers has been slightly lowered.

The new steel tug Phil Sheridan cleared for the "Soo" with three scows. On one is a machine shop, on the other a boarding house for fifty men and on the third is a dump scow. They are owned by Contractor Dunbar and are going to Hay lake channel.

WEST SUPERIOR, WIS.

The season at West Superior promises a large improvement over that of 1888. Stocks of coal on hand will not be depleted before June or July, but the dock capacity will be larger by almost 500,000 tons before the close of the season. Wheat shipments will be light, there being but little in store, but corn shipments may grow correspondingly toward the close of the season, as Nebraska corn is now coming this way. The flour shipments from here will be large, all the line boats having made arrangements to land at the Eastern railway docks, where all railways in the northwest can be reached.

ALPENA MICH.

The past week has been an an unusually brisk one at Alpena as regards shipping. The number of steamers and vessels that cleared was thirty-two, without including the passenger steamers. The shipments were: Lumber, 10,566,000 feet; railway ties, 70,000. Nine cargoes went to Toledo, eight to Cleveland, five to Detroit, four to Buffalo, three to Chicago, two to Ashtabula, and one to Tonawanda.

LAKE FREIGHTS.

The ore freight situation is unchanged and there is little coal for any of the upper lake ports. CHARTERS: Propeller M. M. Drake, ore, Marquette to Ohio ports, $1.10; schooner Penokee, ore, Escanaba to Cleveland, 90 cents; schooner Mary Woolson, ore, Escanaba to Ohio ports, 90 cents. The propeller Nashau, and consorts Gliding Star and Sherman load at Huron for Mackinaw and Cheboygan.

TOLEDO, May 1.—The schooner C. B. Benton was chartered for wheat to Cleveland at 1½c. The nominal rates to Buffalo are 1¾c on corn and 2c on wheat. There are no set rates on coal.

CHICAGO, May 1.—There was a fair inquiry for tonnage yesterday with offerings sufficient to meet all demands. The rates remained firm on the basis 1¾ cents on oats, 2¼ cents on corn, and 2½ cents on wheat to Buffalo.

BUFFALO, May 1.—Coal freights were more active. Rates were steady at 45 and 50 cents. The H. E. Packer takes railroad iron to Chicago on owners' account. Canal freights were quiet and firm with wheat at 4 cents, corn at 3⅝ cents to New York. The canal opened early this morning. Ninety grain boats cleared up to 9 p. m., carrying 800,000 bushels corn.

CANADIAN LICENSED OFFICERS.

DETROIT, April 27.

To the Editor of the Marine Record.

As the maritime law of the Uniten States of America distinctly reads that, every officer of a steam vessel must be certified or licensed by duly appointed inspectors, and be a citizen of the United States, how is it that our inland steamers are officered by foreigners, coming chiefly from Canada. These men come in dozens and droves upon the opening of navigation, secure positions as mates and second mates, and in some cases are appointed masters before the steamer leaves her wintering port. This present spring, in particular, they can be counted in tens; they have their pilot's and master's license all right, framed and placed in a visible part of the steamer's cabin or hallway; but the query is how did they get them? What is the lake pilots' association doing, when they do not question the matter and make investigation concerning these offenders? When did these men reside in this country the stipulated length of time to become citizens and receive their certificates of citizenship, or have they never been admitted as such; if so they have never got them rightfully or legally. There are many new men who could be pointed out this spring known to have never lived in this country previous to their coming now; but, as I am not a detective, it is not part of my funeral to name them. As they all read the MARINE RECORD this hint may benefit some of them to become duly recognized citizen seamen; otherwise, I say, watch them, for more will come, to the detriment of older and able lake pilots. Yours respectfully,

SULA.

BEDDING SUPPLIES FOR VESSELS.

furnished as: *Comfortables, Blankets, Tablelinens Towels, Sheets, Pillow Cases* etc., which the latter, we sew to order at shortest notice, by the well known Boston Dry Goods Store of Kohn & Co. 213 Detroit street 2d door from corner Pearl, Cleveland O.

We prove to any customer that we can save them 20 per cent., which no big expensive establishment can afford to. KOHN & CO.

PROPOSALS FOR STEAM BARGE.—U. S. Engineer Office, Buffalo, N. Y., May 1, 1889. Sealed proposals in triplicate will be received at this office until 12 M., eastern standard time, June 3, 1889, for chartering a steam barge to the United States to be used at Erie harbor, Pa. Attention is invited to the acts of congress approved February 25, 1885, and February 23, 1887, Vol. 23 page 332 and Vol. 24 page 414, statutes at large. Specifications, blank forms of proposals and all necessary information can be had from M. J. C. QUINTUS, Erie, Pa., or from the undersigned.

F. A. MAHAN, Captain of Engineers.

PROPOSALS FOR TUG AND SCOW.—U. S. Engineer Office, Buffalo, N. Y., May 1, 1889. Sealed proposals in triplicate will be received at this office until 12 M., eastern standard time, June 3, 1889, for chartering to the United States for use at Erie harbor, Pa., a tug, scow and dump scows. Attention is invited to the acts of congress approved February 26, 1885, and February 23, 1887, Vol. 23 page 332, and Vol. 24 page 414, statutes at large. Specifications, blank forms of proposals and all necessary information can be had from MR. J. C. QUINTUS, Erie, Pa., or from the undersigned.

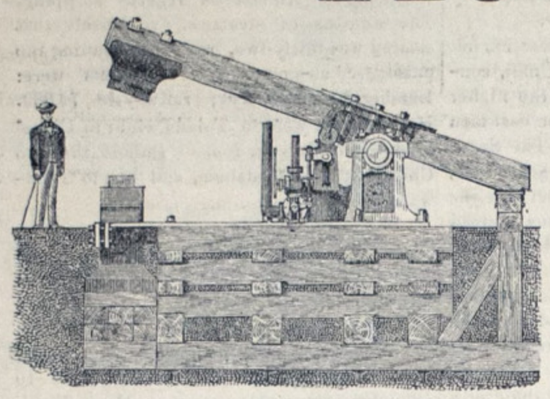
F. A. MAHAN, Captain of Engineers.

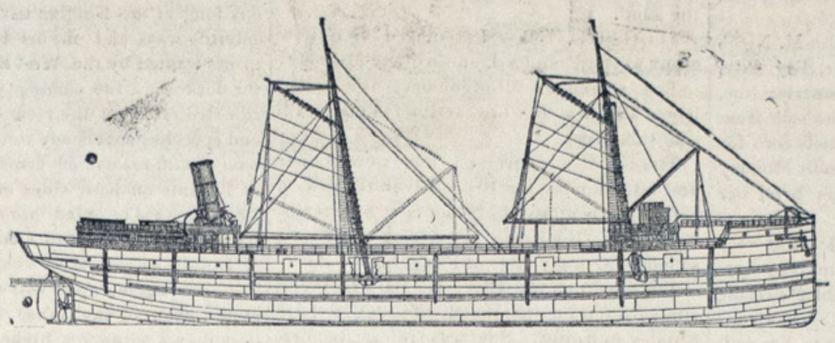
H. D. COFFINBERRY, Pres't. ROBERT WALLACE, Vice Pres't. WM. M. FITCH Sec'y.

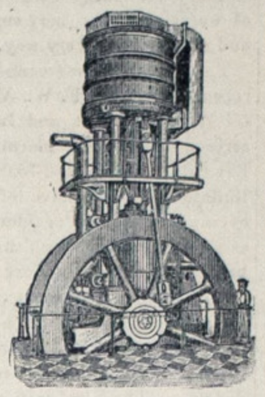
THE CLEVELAND SHIP-BUILDING COMPANY,

Detroit and Center Streets, Cleveland, Ohio,

IRON SHIPS.







Marine and Stationary

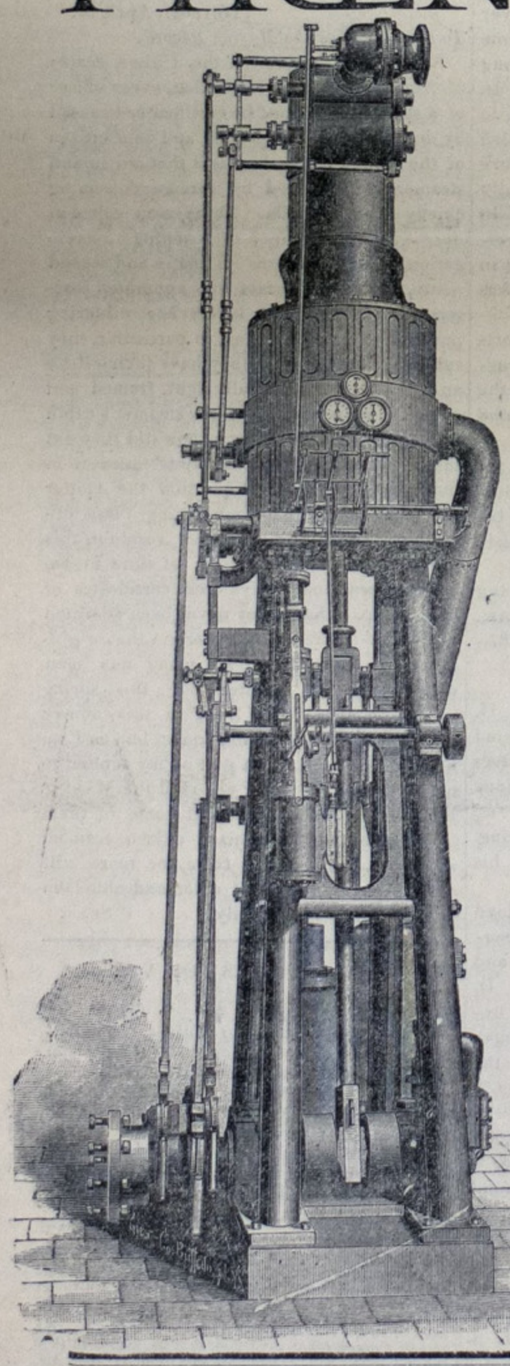
ENGINES AND BOILERS,

Blowing Engines and Steam Hammers,

MILL GEARING AND CASTINGS.

Repairing and Jobbing Solicited. Office on Viaduct.

PHŒNIX IRON WORKS.



Manufacturers

OF

STEEPLE, FORE AND AFT COMPOUND & TRIPLE EXPANSION

MARINE ENGINES,

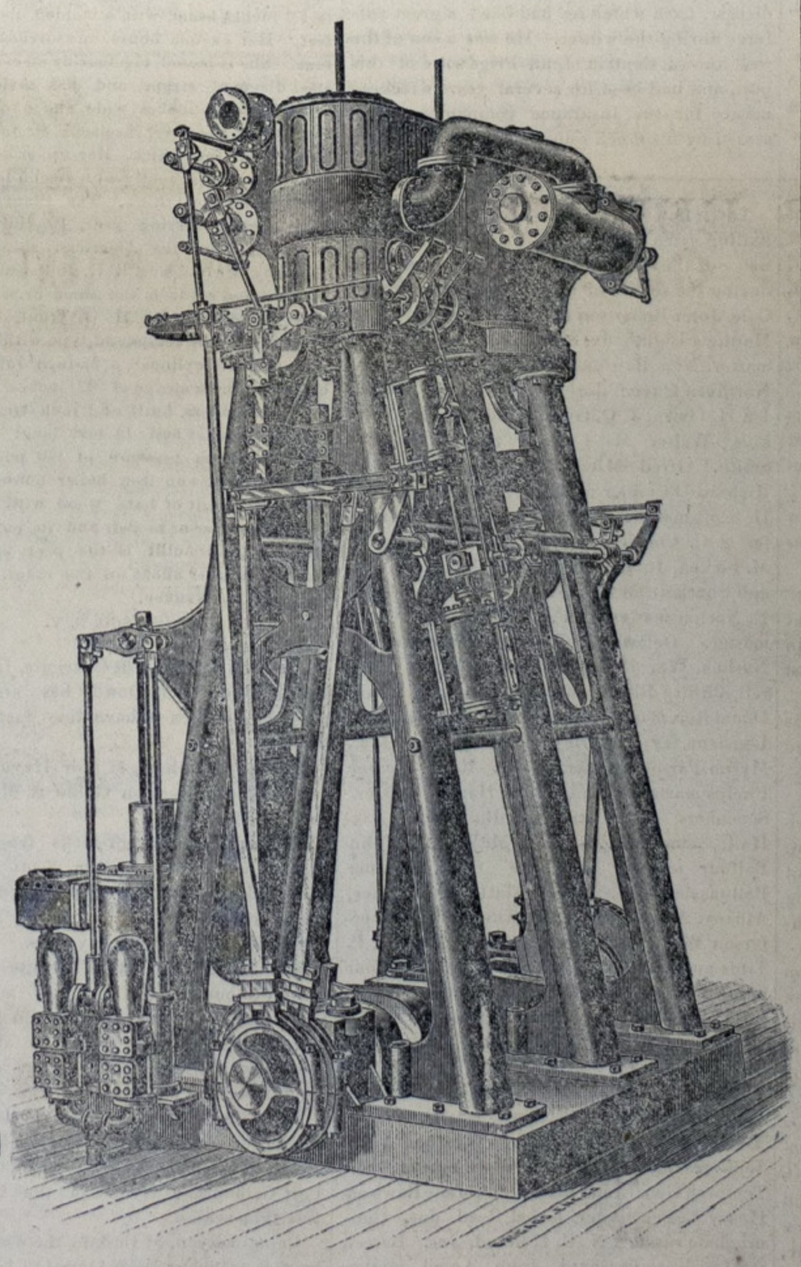
WITH BOILERS

OF

MODERN DESIGN.

PORT HURON,

MICH.



CAPT. GEO. A. SIMPSON,

Compass Adjuster,

COMPASSES, BAROMETERS, PATENT LOGS AND MARINE GLASSES REPAIRED,

Schooners can have their Compasses Adjusted for Local Attraction at the time of repairs by stating how much they are out on East or West Courses, and which way it leads, North or South of above Courses

161 River St., Cleveland, O.

A. J. MORSE & SON.

DIVING APPARATUS

140 CONGRESS ST. BOSTON.

DOWNIE **EUCALYPTUS** Boiler Scale Preventitive and Remover,

PATENTED IN ALL THE PRINCIPAL COUNTRIES IN THE WORLD.

Manufactured by the DOWNIE B. I. P. Co

204 MARKET-ST. SAN FRANCISCO. Branch Office, 4 Red Cross-st Liverpo

This extract from the leaves of the Eucalyptus tree, has been adopted and is now in use by most of the American SS. lines, the U. S. Navy, and the largest stationary plants in the country. Send for pamphlet, containing letters from prominent engineers directions for use, price, etc.

DELAFIELD, MORGAN, KISSELL & CO., Agts., 74 HUDSON ST., NEW YORK.

VESSEL OWNERS AND AGENTS.

ESTES & WALKER,

Ship and Coal Brokers,

VESSEL AGENTS AND OWNERS.

Marine insurance and collections. References Moss and Third National Banks.

602½ Water street. SANDUSKY, O.

THOS. WILSON

MANAGING OWNER

Wilson's Transit Line.

Gen. Forwarder. Freight and Vessel Agent.

CLEVELAND, O.

MOORE, BARTOW AND GILCHRIST,

Ship Brokers and gents,

No. 101 St. Clair Street, Room 15. CLEVELAND, - OHIO.

PALMER & BENHAM,

Vessel Owners & Agents,

New Bank Building, corner of Superior and Bank Street, Cleveland, Ohio.

C. J. MAGILL,

VESSEL AGENT,

Vessels Chartered, Bought and Sold. Lake Freights and River Tow Bills Collected and promptly remitted.

94 Board of Trade, Chicago, Ill.

C. W. ELPHICKE. JAS. A. MYERS

C. W. ELPHICKE & CO.,

Vessel Agents

AND

MARINE UNDERWRITERS.

8 and 8 Sherman St,

Rooms 10 and 11 Parker Block. CHICAGO, ILL.

ALEX McDOUGALL,

VESSEL AGENT AND BROKER,

Duluth.

Owners and masters of vessels wishing to get cargoes of grain from this port will do well to confer with me. Will be glad to furnish information in regard to cargoes, also in relation to docks, depth of water, etc., at **Duluth, Agate Bay** (new iron ore port), **Port Arthur, Washburn, Ashland,** and all points near the west end of Lake Superior. Good gangs of men furnished on short notice for trimming cargoes of grain, loading and unloading all kinds of freight.

JAMES T. ROSE,

Vessel Agent and Broker,

Marine Insurance,

Room 6, Exchange Building, Duluth, Minn. I have an excellent gang of Trimmers this season, Captain Miller's old Crew.

Special Attention Paid to Chartering Vessels, and seeing that they get dispatch in Port.

CORRESPONDENCE SOLICITED.

H. J. WEBB & CO.,

Ship Brokers, Vessel Owners and Agents.

[ESTABLISHED IN 1856.]

H. J. Webb & Co., will charter Vessels for Lake Trade, special attention given to Chartering Vessels in the Lake Superior Iron Ore Trade, both for the season and single trip.

ARCADE BUILDING, 101 ST. CLAIR ST., Room 27. Cleveland, Ohio.

TELEPHONE { Office, No. 338. Residence, No. 1328.

WARNER & BECKER,

Vessel Agents and Brokers,

ROOM 10,

Arcade B'ld., 101 St. Clair St,

CLEVELAND, OHIO.

H. J. H. BROWN. EDWARD SMITH

BROWN & CO.,

Ship Brokers and Agents.

Special Attention given to Surveying, Appraising and Settling Marine Losses.

Exchange Building, 202 Main-st., Buffalo, N.Y.

River Machine Co.,

[Successor to G. R. GALE,]

171 River St., Cleveland, Ohio,

Are prepared to Manufacture and do General Repairing on Marine Engines and all other Machine Work.

We have also a full line of pulleys and shafting and are prepared to do all kinds of Stone quarry Work.

TEARE, WIGHT & CO.

ROBERT E. HILLS,

57 & 59 North Wells St., Chicago, Ill. Telephone 3321.

STEAM FITTING AND HEATING,

Wrought Iron Pipe & Fittings

ENGINEER'S SUPPLIES.

General Jobbing Work Done Promptly.

Also, Proprietor of North Side Brass Works

WM. H. DeWITT,

Attorney and Proctor in Admiralty.

ROOM No. 6, BLACKSTONE BLOCK.

CLEVELAND, OHIO.

FOR SALE.

STEAM BARGE PASSAIC, and four consorts. Capacity, 3 300 tons coal or 2,400,000 feet timber. Boat now laid up at Buffalo. For terms and price, inquire of J. M. JONES, 52 Griswold St., or C. C. BLODGETT, 242 Woodbridge St., Detroit, Michigan.

FOR SALE.

HARBOR TUG for sale. Engine 18x20, boiler 5 feet 6 inches by 11 feet, and allowed 100 pounds of steam, and is A2, valued at $5,500 by Lloyd's register, but the owner will take $5,000 cash. For further particulars inquire at 113 Franklin avenue, Cleveland, O.

CAPT. E. DAHLKE.

TOLEDO, OHIO, MONTPELIER, OHIO, } OAR MILLS. NEPTUNE ANCHOR WORKS.

DEGRAUW, AYMAR & CO.,

MANUFACTURERS AND IMPORTERS OF

CORDAGE OAKUM, WIRE ROPE

CHAINS, ANCHORS, OARS, BLOCKS

COTTON AND FLAX DUCKS, FLAGS

BUNTINGS, RUSSIA BOLT ROPE,

MARINE HARDWARE AND SHIP-CHANDLERS' GOODS GENERALLY.

NOS. 34 AND 35 SOUTH STREET, NEW YORK.

S. B. GRUMMOND,

OWNER OF FIRST CLASS

Tugs for Wrecking, Raft Towing, Etc.

STEAM PUMPS, ROTARY AND WORTHINGTON.

Improved Horizontal Straight Base Hydraulic Jacks.

Sub-marine Divers, Hawsers; Lighters, etc.

WAREHOUSE AND OFFICE ON DOCK, FOOT OF FIRST STREET.

OWNER OF TUGS Winslow, Leviathan, M. Swain, Champion, John Owen, Wm. A. Moore and Oswego. | Detroit, Mich.

Also Steambarge MARY PRINGLE with Steam Hoister and Wrecking Outfit on Board.

OFFICE OPEN DAY AND NIGHT—SATISFACTION GUARANTEED.

BRANCH OFFICE at PORT HURON & CHEBOYGAN, MICH.

WRECKING TUG

LEVIATHAN, CAPTAIN M. SWAIN, STATIONED AT CHEBOYGAN

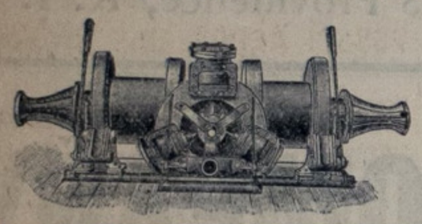
With Plenty of Wrecking Material on Board and in Warehouse.

R. DUNBAR & SON,

—MANUFACTURERS OF—

Hoisting Engines, Single and Double Drums

FOR VESSELS & DOCKS.



Accompanying Cut shows our Double Drum Hoister, operated by ONE engine. Two hatches can be unloaded at once. Two machines in one, at low cost. Send for descriptive catalogue-

R. DUNBAR & SON, BUFFALO, N. Y.

H. B. & G. B. BURGER,

Ship-builders and Contractors.

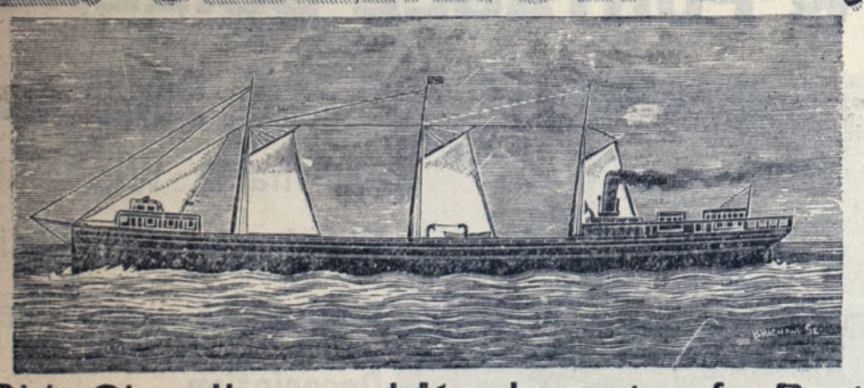
MANITOWOC DRY DOCK.

Dry Dock will admit Vessels of 1100 tons drawing 12 feet. Have also a set of Boxes in connection with the Ship yard capable of lifting Vessels of 350 tons. A large stock of SPARS CONSTANTLY ON HAND.

VESSELS DOCKED AND REPAIRED ON REASONABLE TERMS.

MANITOWOC, WIS.

H. CHANNON CO.,



Ship Chandlers, and Head-quarters for Best Steel and Iron Tiller Ropes.

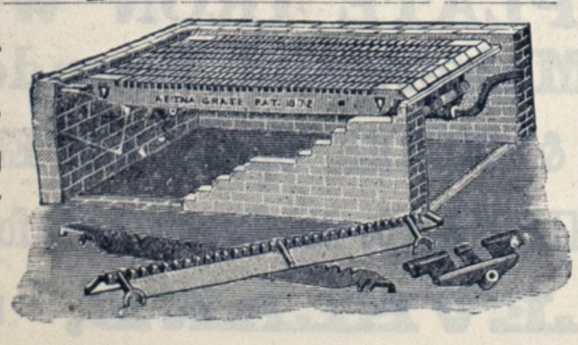
22 to 26 Market-St. near Randolph-St., Chicago

THE ÆTNA GRATE.

G. C. BARNES, Agt.

This Improved Shaking Grate Especially Adapted to Burning Slack.

Glob Iron Works, manufac's., office and Foundry, corner of Elm and Spruce-sts., CLEVELAND, O.



Agent for Ericson's patent oil distributor for vessels. Also for Roberts patent boat detaching apparatus.

THOS. DREIN & SON

BUILDERS OF

METALLIC LIFE BOATS

and LIFE RAFTS of all classes Government and Pleasure Boats of Wood. Block Cork Life Preservers. Sole manufacturer of Capt JONATHAN CONE'S celebrated

PatentLifeRafts

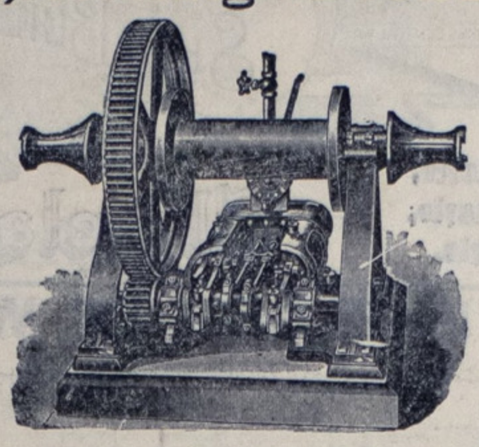
Tatnal and Railroad Wilmington Del

EAGLE IRON WORKS,

MANUFACTURERS OF

Duplex, Hoisting & Deck Engines

Specially adapted for Boat uses, Raising Sail, Hoisting Anchor, Pulling in Tow Line etc., etc.



Pumps with ten inch Barrels Connected to Gypsy Spools.

THE SIMPLEST AND BEST OFFERED—SATISFACTION GUARANTEED.

SUBMERGED FLUE BOILERS

Engines, Boilers and Pumps on Hand for Prompt Shipment

CIRCULARS AND PRICES ON APPLICATION.

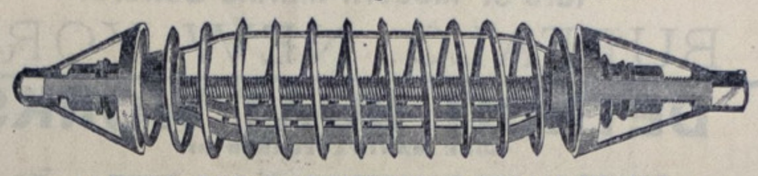
Woodbridge, Fifth and Congress-sts, Detroit, Mich.

DETROIT SHEET METAL AND BRASS WORKS,

Marine Coppersmiths, Pipe Fitters and Metal Workers,

Manufacture and keep in stock the most approved designs in

Brass dead lights, all brass locks, spear heads, pilot house tops, whistles, motion indicators, windsails, head light frames and flue cleaners.



AGENTS FOR WORTHINGTON STEAM PUMPS.

WORKS 64 TO 72 ORLEANS ST., DETROIT, MICH.

Forest City CIGAR STORE

THOMAS LIGGET, Prop'r.

MANUFACTURERS AND JOBBERS

CIGARS AND TOBACCOS.

259 PEARL STREET

J. E. SIMPSON & CO.,

GENERAL CONTRACTORS.

AND BUILDERS OF

SIMPSON'S PATENT IMPROVED TIMBER DRY DOCK

NO. 35 BROADWAY, NEW YORK CITY.

THE STANDARD SELF-DETACHING DAVIT FALL HOOK,

FOR THE LOWERING OF LIFE AND YAWL BOATS.

By referring to the accompanying illustrations owners and masters of vessels cannot fail to appreciate the great advantage of this device, which at once fills a long felt want. Safety, speed, and its being non-intricate, make it a veritable boon to mariners.

These hooks have been thoroughly tested with entire satisfaction, and may be seen in practical use on steamers Samuel Mather, Progress, Lackawanna, schooners Golden Age, Wadena, Fayette Brown, Thomas Quayle, Warner, Annabel Wilson, Ahira Cobb, H. A. Kent, Henry A. Hoag, Galatia, Alva Bradley, Ogarita, Hattie Wells, S. A. Irish Sumatra, Montgomery and John O'Neil.

We ask attention of our readers to the Standard self-detaching davit fall hook as advertised in the columns of this paper, and we are pleased to note that the master of the Sumatra, who has just been supplied with a set of these hooks, writes to the inventors as follows:

PORT HURON, April 19.

Mr G. W. Learman, Cleveland, Ohio.

Dear Sir.—I am happy to inform you that the patent self detaching hooks you furnished the Sumatra this spring are all, and more than you represent them to be; they worked very successfully with the vessel going at the rate of seven miles an hour. I shall recommend your hooks to any and every one of my acquaintances in the vessel line. Yours, etc. (Signed) W. E. RUSSEL, master of the Sumatra.

Sold by ship chandlers. Address

GEORGE LEARMAN,

24 Seneca st., Cleveland, Ohio.

J. C. GOSS.

Sail Maker and Rigger,

18 Woodward Av.,

DETROIT - - MICH

SEND FOR ILLUSTRATED CATALOGUE OF BUNTING, FLAGS, AWNINGS, ETC.

DIXON'S

GRAPHITE

PIPE JOINT GREASE

FOR STEAM OR GAS PIPES

makes a perfect joint that can be opened with ease in three years or thirty years. Bolts, screws, etc., smeared with this grease will not rust even in the dampest places. Write to Jos. Dixon Crucible Co. Jersey City, N. J., for circulars.

sary to indulge in comment. Let us compassionate the one cruel frailty of a man, in all else, and in his proper nature as gentle and generous as he was brave. His next magnificent exploit was the battle of Copenhagan in 1801, in which, after a struggle of terrible severity, he shattered the naval power of Denmark, and along with it the dreaded coalition against England of the three northern kingdoms. Never were the characteristic and heroic qualities of the man more brilliantly displayed than on this trying occasion. In the moral courage to accept responsibility at all hazards, no man ever surpassed him. In the heat of the battle, his chief, Sir Hyde Parker, in deadly anxiety as to the issue of what at a distance seemed to be a hopeless conflict, signalled him to discontinue action. "D— the signal," said Nelson when this was reported to him. "Keep mine for closer battle flying. That's the way I answer such signals. Nail mine to the mast." And with a certainty of professional disgrace and ruin staring him in the face, in case of failure, he worked out his great triumph.

Commodore Nelson's services here ceased, his fame would still have been assured as the greatest of England's naval heroes, but a crowning glory awaited him. In the earlier part of 1805, glowing with fierce ardor and impatience, he had chased half round the world a French fleet of nearly double the force of his own, scared by the very terror of his name, and on the morning of the memorable 21st of October of that year, the desire of his eyes was satisfied, when, in the Bay of Trafulgas, he saw before him the combined navies of France and Spain moving to meet him in frank fight. Of the glorious consummation which followed, we need not speak in detail. Ere night, the power of France upon the seas was annihilated, and her threatened invasion of England had become an abortive dream. But Nelson was no more. He died as such men wish to die, amid the thunders of his mightiest victory. The character of Nelson was, for a man of his greatness, unusually simple and transparent. A more absolute singleness of aim and aspiration than his, it is difficult even to conceive of. Literally on fire with ardor and enthusiasm, he was driven by it imperiously in one direction. The greatest of sailors—he was a sailor and a great man. In coolness, foresight, promptitude instant intuitive decision, and a daring which, even when it seemed at times to touch temerity, was yet regulated by reason. He has, perhaps, never been equalled. His anture was most noble and humane.

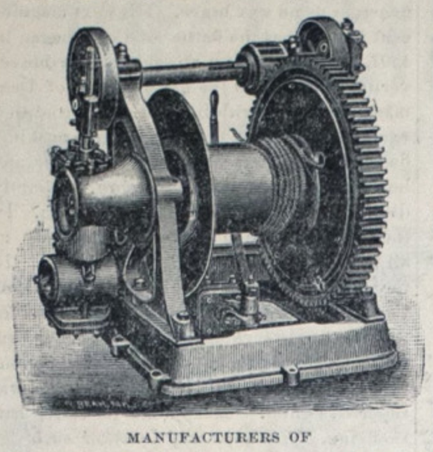
A CHEER HEARD ROUND THE WORLD.

Nothing has been read here with more interest than the reports of the Samoan disaster Captain Kane's handling of the Calliope is extolled by the English, even though Ireland claims him as Irish. The press does, as Admiral Sir Geoffrey Hornby did, justice to her American and German consorts. The cheer of the Trenton's crew to the Calliope has been heard in England. "Consider the scene," says The Telegraph, "and the matchless heroism and generosity of this Yankee crew. They could see the Queen's ship fighting the hurricane and appreciate the gallantry of the effort with the generous pleasure of true mariners. We do not know in all naval records any sound which makes a finer music upon the ear than the cheer of the Trenton's men. It was distressed manhood greeting triumphant manhood, the doomed saluting the saved. It was pluckier and more humane than any cry raised upon the deck of a victorious line of battle ship. It never can be forgotten, never must be forgotten by Englishmen speaking of Americans. That dauntless cheer to the Calliope was the expression of an immortal courage." These are extracts from a long editorial in a London paper all in a similar tone.

A SAD ANNIVERSARY.

Tuesday was a sad anniversary to one or two old-time marine and vesselmen in Duluth, and a few storied rehearsals of the horror of twenty one years ago were made. At 11 o'clock on the evening of April 8, 1868, the elegant sidewheel passenger steamer Sea Bird, of the Gooderich line, left Milwaukee for Chicago, having on board a passenger list of about eighty people and a crew of seventy-five. She took on a large number of passengers at Racine and continued on her journey. When the boat had nearly reached Waukegan an alarm of fire was raised, and flames soon afterward shot up all around the engines and stopped their working. A few minutes afterward an explosion took place, and the upper works of the steamer were blown into fragments. The wreck burned to the water's edge in about two hours. Quite a little sea was running, and the construction of hastily improvised rafts was proceeded with under great difficulty. These frail floats were soon destroyed, and but few passengers ever reached the shore. Only two of the Racine passengers escaped, and the full list of the lost was never known, although the number was estimated at over 200. Many Milwaukee business men were drowned. The hull of the boat drifted southward and then went down close to the Illinois shore. The loss of life was the greatest ever known on Lake Michigan, with the single exception of the famous Lady Elgin disaster about eight years previous.

THE FILER & STOWELL CO.
MILWAUKEE, WIS.

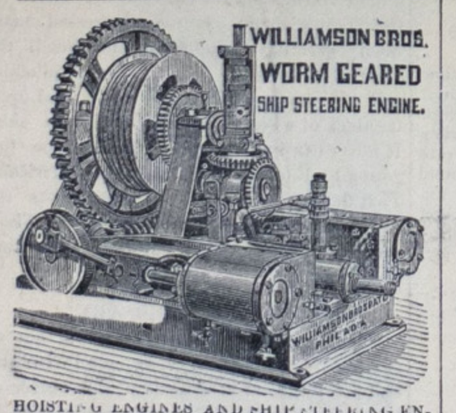


MANUFACTURERS OF
Double Cylinder Steam Hoists for Steamboats and Barges.
(WRITE FOR CIRCULAR AND PRICES).

HOWARD H. BAKER & CO.
Ship Chandlers & Sail Makers
WHOLESALE AND RETAIL DEALERS IN
Cordage, Wire Rope, Blocks, Canvas, Anchors, Chains, Paints, Oils, Naval Stores.
Cylinder, Lard, Signal and Lubricating Oils a Specialty.
AGENTS FOR THE
American Ship Windlass Company for Lakes Erie and Ontario.
Importers of Nautical Instruments of Every Description.
18, 20, 22, 24, & 26 Terrace.
BRANCH STORE foot of Washington street (formerly D. S. Austin & Co.)
Buffalo, N. Y.

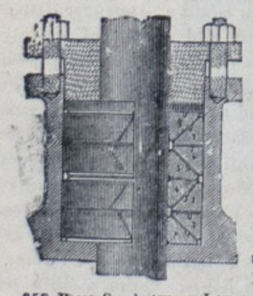
MULLEN & CO.,
DEALER IN
COAL
Docks at Government Pier, Whiskey Island,
AND ADJOINING GLOBE DRY DOCK.
All Fully Equipped with Revolving Derricks
ALSO, LIGHTER CARRYING DERRICK,
and One Hundred Two-Ton Buckets.
Main Office, 81 Perkins Building, East Side of Main Street Bridge.
Dock Office, 127 West River St.
Telephone No. 8. CLEVELAND, OHIO.
BOATS COALED DAY AND NIGHT.

S. . CONKLIN & SON.
SAIL MAKERS.
Awnings, tents and f gs,
Boilers and Steam Pipe Covers
PRICES QUOTED ON APPLICATION.
Grummond Building
FOOT OF FIRST STREET,
DETROIT. MICH.
Telephone 2096



HOISTING ENGINES AND SHIP STEERING ENGINES, with either Frictional, Spur or Worm Gear of various patterns to suit all purposes.

KATZENSTEIN'S

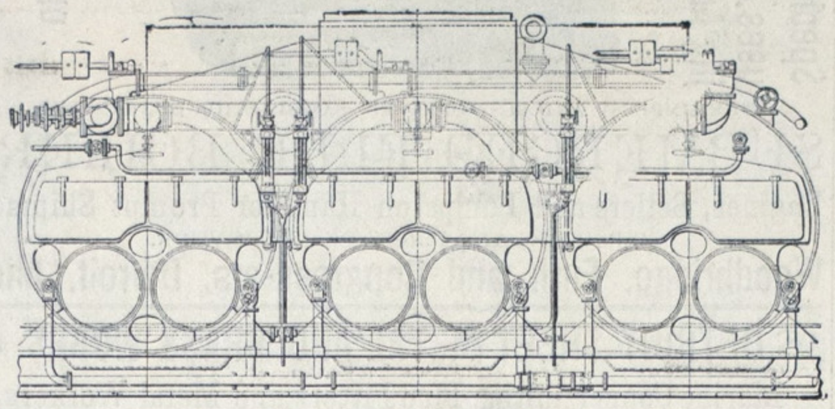


SELF-ACTING METAL PACKING
FOR PISTON RODS, VALVE STEMS, Etc.
Adopted and in use by the principal Iron Works and Steamship Companies within the last eight years in this and Foreign countries. Also flexible tubular metallic packing for slip-joints on steam pipes and for hydraulic pressure. For full particulars and references address
L. KATZENSTEIN & CO
857 West St., between Leroy and Clarkson-st, N. Y.
CAPT. THOS. WILSON, who uses this packing on his Steamers, and THE MARINE RECORD are Agents for Cleveland and the Lakes.

McKINNON BROS.
Ashtabula Harbor, O.,
Machinists, Shipsmiths & Steamfitters;
ALSO, DEALERS IN
Engineers' Supplies, Lubricating and Burning Oils.
BUSINESS PROMPTLY ATTENDED TO.

ESTABLISHED 1847
Thomas Quayle's Sons,
SHIP BUILDERS
OFFICE & WORKS CENTRAL WAY
Thos. E. Quayle,
George L. Quayle,
Wm. H. Quayle.
Cleveland, O.

LAKE ERIE BOILER WORKS.



The best equipped plant in America for the manufacture of Modern Marine Boilers.
BUFFALO. NEW YORK

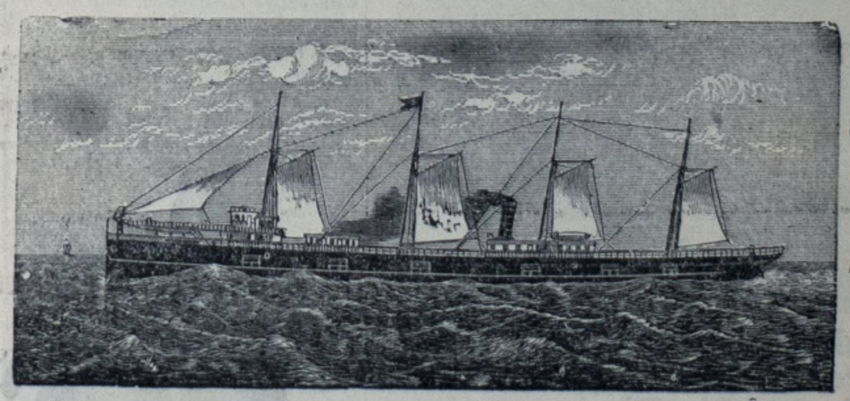
DETROIT BOAT WORKS.
SOLE MANUFACTURERS OF
Clark's Patent Metallic Life Rafts.

HIGHLY INDORSED BY THE BOARD OF SUPERVISING INSPECTORS.
Yawl Boats in stock 14, 16, 18, 20 and 22 feet long. Life Boats in stock 18, 20 and 22 feet long.
Steam and Hand Steering Wheels to Order
Shops ft. of ORLEANS ST., DETROIT MICH.

Established in 1857.
AMERICAN SHIP WINDLASS CO.
Builders of Steam Messenger Chain and Hand Windlasses, Power, Crank and Steam Capstans, Wharf and Ferry Drops. Their Capstan Windlasses have a Power Capstan with a single head which has power and speed arrangement entirely independent of the Windlass, and which makes a pirect connection with the Windlass, without the intervention of any gearing to complicate it and increase the friction.
In all their styles of Steam Windlasses, the American Ship Windlass Co., makes a direct connection between the Engines and the Windlass without counter shafts or additional gearing. This saves friction and liability to break down, and conduces to durability and ease in operating. These windlasses also have a counterbalance for the engines, and an automatic lubricator for worm and worm gear. The engines are placed together in the most accessible position. The above improvements and others too numerous to mention, but which are familiar to Masters, Owners and Builders, are covered by Patents owned exclusively by the American Ship Windlass Company.
For plans and information, address
FRANK. S. MANTON, Agt.,
P. O. box 53 Providence, R. I.

H. M. HANNA, PRESIDENT.
JOHN F. PANKHURST, VICE PRESIDENT AND GENERAL MANAGER.
LUTHER ALLEN, SECRETARY AND TREASURER
THE GLOBE IRON WORKS COMPANY
BUILDERS OF
IRON AND STEEL STEAMSHIPS
AND VESSELS OF ALL DIMENSIONS.
Triple Expansion, Compound, High Pressure and Low Pressure
MARINE AND STATIONARY ENGINES,
MARINE, STATIONARY & PORTABLE BOILERS.

Blast Furnace and Rolling Mill Machinery, Hoisting and Pumping Engines, Portable Hoisting Engines.



Steam Pumps, Steam and Hand Windlasses, Winches, and Marine Appliances of Every Description.

GENERAL SHEET AND PLATE IRON WORKERS,
Machinists, Boiler-Makers and Founders.
Builders of
IRON STEAMSHIPS ONOKO, WILLIAM CHISHOLM, J. H. DEVEREUX, ETC.
STEEL STEAMERS SPOKANE, CAMBRIA, CHAS. J. SHEFFIELD, IRA H. OWEN, CORSICA, CORONA, NORTHERN LIGHT NORTH WIND, NORTHERN KING, E. P. WILBUR
PASSENGER STEAMER DARIUS COLE, AND STEAM YACHT TWILIGHT.
IRON TUGS INTERNATIONAL AND RECORD.
OFFICE & WORKS, Spruce and Elm Streets.
IRON SHIP YARD, Old River Bed, foot of St. Paul St
CLEVELAND, OHIO.

Established in 1859.
HENRY LEOPOLD.
Manufacturer and Dealer in all kinds of fine and plain
FURNITURE & UPHOLSTERY,
Mattrasses and Vessel Furniture
A SPECIALTY.
Warerooms 798 and 800 Lorain-st., near Fulton. Factory 10 Willet-st.
CLEVELAND, OHIO.

Cleveland Dry Dock Co,
Shipbuilding, Drydocking, Repairing and Spar Making.
CLEVELAND, OHIO.

CARLETON & COLE,
Port Huron Machinery & Supply Depot,
PORT HURON, MICH.
Manufacturers' Agents and Dealers in Boilers, Engines, Steam and Wrecking pumps, Engineers Supplies, and Fit-outs for Steamers and Vessels.
405 and 407 Water st., East

Shipyard for Sale or Rent,
THE LOOMIS SHIPYARD AT ERIE PA., IS OFfered for sale or rent, including all materials tools and good will. A first class opening for a ship carpenter with moderate capital. Terms to suit purchaser. If not disposed of as a whole, will sell tools materials, etc., in lots to suit. For inventory, terms etc., apply at MARINE RECORD office, or to D. L. HUBBARD, Erie, Pa.